

Manual No. 61-1092

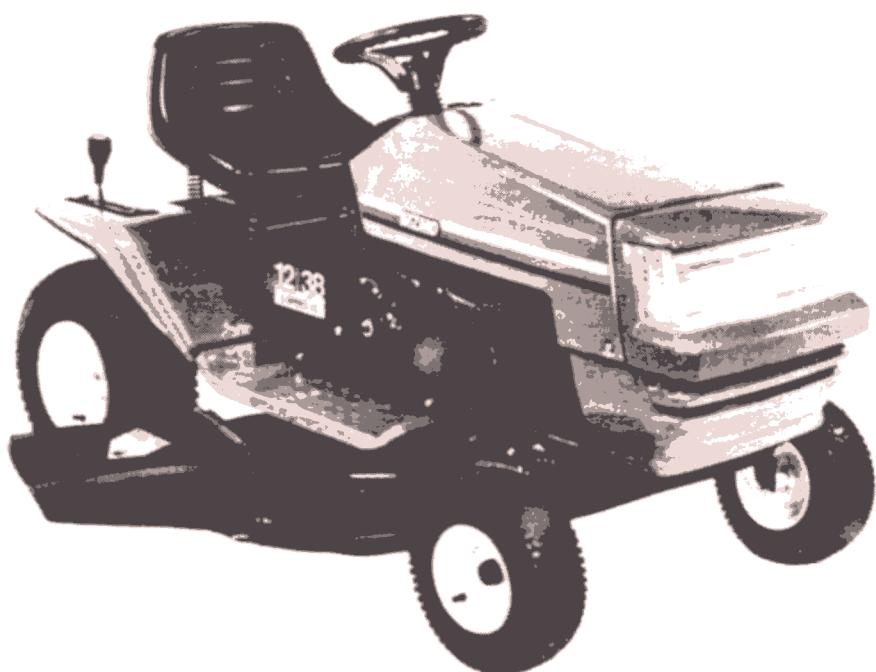
Western Auto

OPERATION AND SERVICE INSTRUCTIONS Wizard Lawn Tractor

STOCK NUMBER
93-7122-0

MODEL NUMBER
MTD7122B09

FACTORY NUMBER
130-610F098



Thank you for purchasing an American-built product.

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WESTERN AUTO LAWN TRACTOR WARRANTY

MTD7122B09

LIMITED WARRANTY

Western Auto Supply Company warrants to the original retail purchaser that this Wizard product is free from defects in material and workmanship and agrees to repair any product free of charge within these time periods from date of purchase:

One year, if the product is used for personal, family, or household use;

90 days, if the product is used for any other purpose such as commercial or rental use.

A battery which proves defective within ninety (90) days will be replaced without charge. After 90 days but within one year from the date of purchase, Western Auto will replace the defective battery for a charge of 1/12 of the current retail price of the battery for each full 30 day period between the date of purchase and the date of return.

The company manufacturing the engine furnishes their own two year warranty and provides service through their authorized field service facilities. For additional information, see the warranty covering the engine. Repair service arrangements may be handled through any participating Western Auto Store.

Excluded from this warranty are: normal wear and maintenance, and mechanical adjustments which are not due to defects in material or workmanship. For assistance in making such adjustments, consult your owner's manual. Any unit which has been altered, misused, abused, or repaired by other than a Western Auto authorized service facility is also excluded.

For repair service return unit with proof of purchase date to any participating Western Auto Store. If difficulty is encountered in having this warranty honored, contact: Western Auto Supply Company, Consumer Affairs Section, General Service Department, 2107 Grand Avenue, Kansas City, Missouri 64108. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

WARNING: This unit is equipped with an internal combustion engine and should not be used on or near any unimproved forest-covered, brush-covered or grass-covered land unless the engine's exhaust system is equipped with a spark arrester meeting applicable local or state laws (if any). If a spark arrester is used, it should be maintained in effective working order by the operator.

In the State of California the above is required by law (Section 4442 of the California Public Resources Code). Other states may have similar laws. Federal laws apply on federal lands. A spark arrester for the muffler is available through participating Western Auto Stores.

SLOPE GAUGE

(Keep this sheet in a safe place for future reference.)

USE THIS SHEET AS A GUIDE TO DETERMINE SLOPES WHERE YOU MAY NOT OPERATE SAFELY.

Cut A This Line

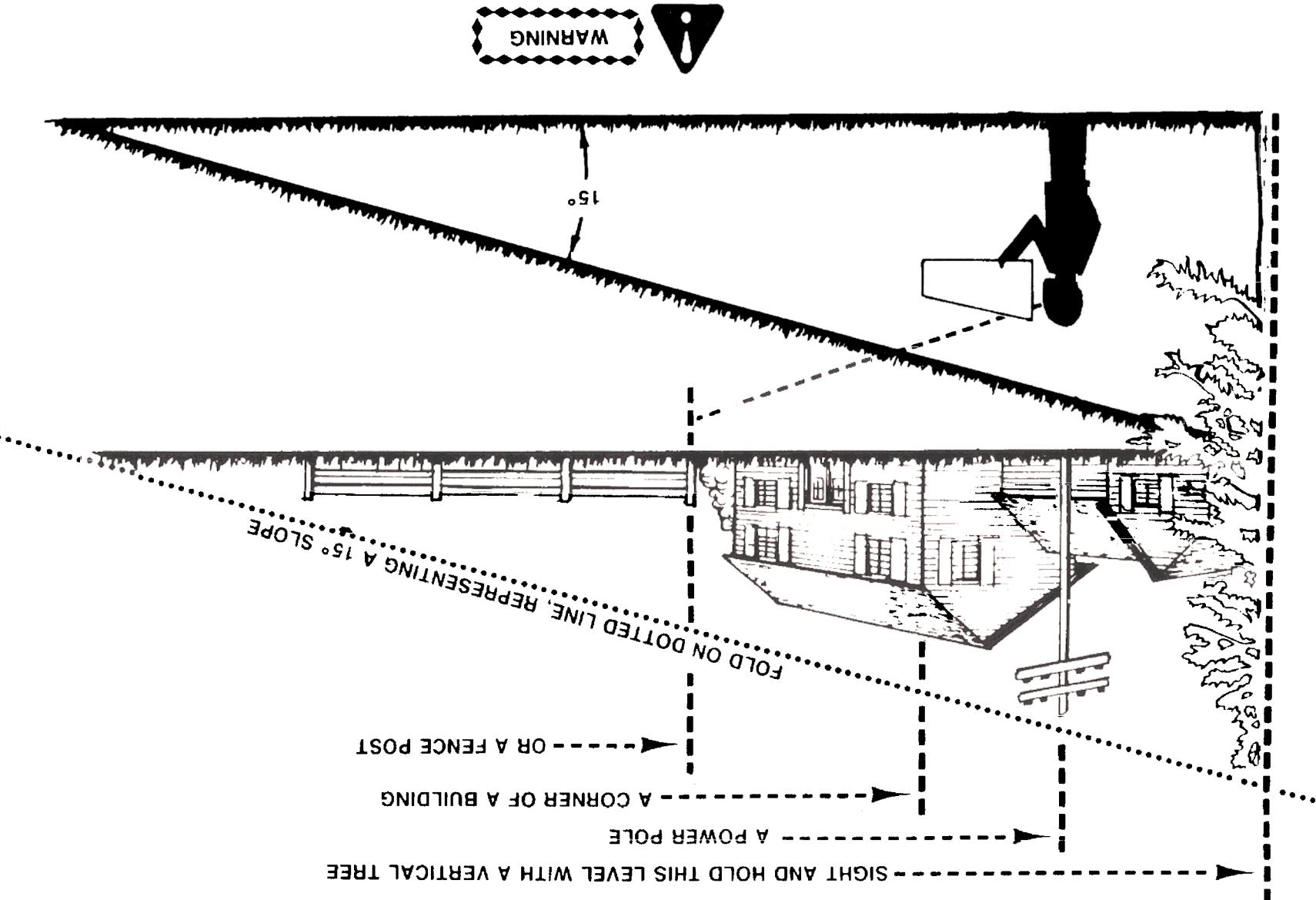
SIGHT AND HOLD THIS LEVEL WITH A VERTICAL TREE

A POWER POLE

A CORNER OF A BUILDING

OR A FENCE POST

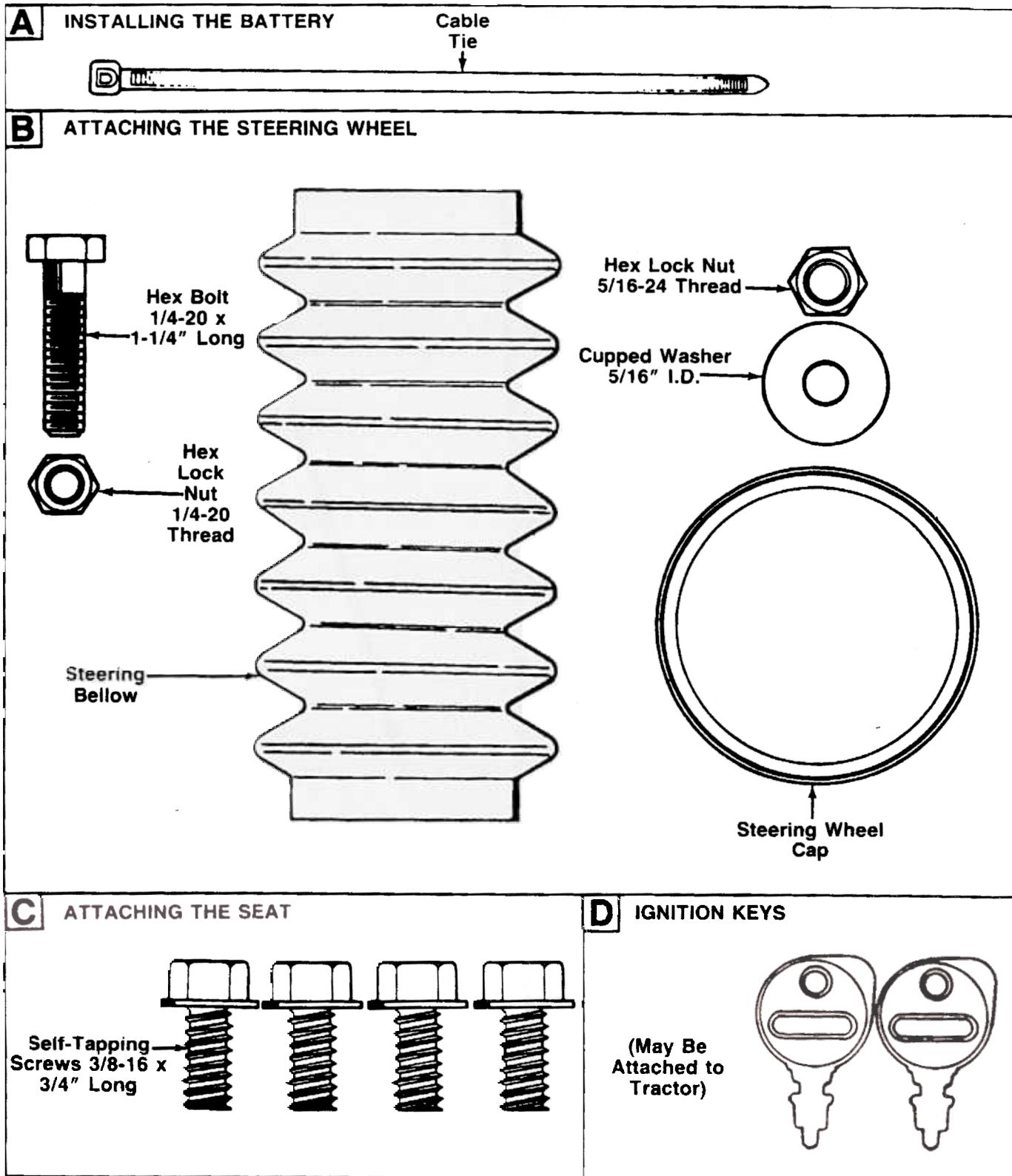
FOLD ON DOTTED LINE, REPRESENTING A 15° SLOPE



CONTENTS OF HARDWARE PACK

Remove this sheet from your owner's manual and lay the hardware on the illustration for identification purposes. After assembly, keep the Slope Gauge which is on the reverse side of this sheet for future use.

(Hardware pack may contain extra items which are not used on your unit.)



0
INCHES

2

3

4

IMPORTANT

RULES FOR SAFE OPERATION



THIS SYMBOL POINTS OUT IMPORTANT SAFETY INSTRUCTIONS WHICH, IF NOT FOLLOWED COULD ENDANGER THE PERSONAL SAFETY AND/OR PROPERTY OF YOURSELF AND OTHERS. READ AND FOLLOW ALL INSTRUCTIONS IN THIS MANUAL BEFORE ATTEMPTING TO OPERATE YOUR UNIT. FAILURE TO COMPLY WITH THESE INSTRUCTIONS MAY RESULT IN PERSONAL INJURY. WHEN YOU SEE THIS SYMBOL—



DANGER

Your unit was built to be operated according to the rules for safe operation in this manual. As with any type of power equipment, carelessness or error on the part of the operator can result in serious injury. If you violate any of these rules, you may cause serious injury to yourself or others.

1. READ THIS OWNER'S MANUAL carefully in its entirety before attempting to assemble or operate this unit. Keep this manual in a safe place for future and regular reference and for ordering replacement parts.
2. This unit is a precision piece of power equipment, not a plaything. Therefore exercise extreme caution at all times.
3. Know the controls and how to stop the machine quickly.
4. Do not allow children to operate vehicle. Do not allow adults to operate it without proper instruction. Only persons well acquainted with these rules of safe operation should be allowed to use your mower.
5. Wear sturdy, rough-soled work shoes and close-fitting slacks and shirts to avoid entanglement in the moving parts. Never operate a unit in bare feet, sandals, or sneakers.
6. To prevent injury, do not carry passengers or give rides. Keep children, pets and bystanders out of the area while mowing. Only the operator should ride on the unit and only ride in the seat.
7. Check overhead clearance carefully before driving under power lines, guy wires, bridges or low hanging tree branches, before entering or leaving buildings, or in any other situation where the operator may be struck or pulled from the unit, which could result in serious injury.
8. To maintain control of the unit and reduce the possibility of upset or collision, operate the tractor smoothly. Avoid erratic operation and excessive speed.
9. Keep the area of operation clear of all persons, particularly small children and pets. Stop engine when they are in the vicinity of your mower. Although the area of operation should be completely cleared of foreign objects, a small object may have been overlooked and could be accidentally thrown by the mower in any direction and cause injury to you or a bystander.
10. Always wear safety glasses or eye shields during operation or while performing an adjustment or repair, to protect eyes from foreign objects that may be thrown from the machine in any direction.
11. Stop the blade(s) when crossing gravel drives, walks or roads.
12. Disengage all attachment clutches and shift into neutral before attempting to start engine.
13. Before leaving the operator's position, disengage blade(s), place shift lever in neutral, engage parking brake, shut engine off and remove key.
14. Do not put hands or feet near or under rotating parts. Keep clear of the discharge opening at all times as the rotating blade(s) can cause injury.
15. Disengage power to attachment(s) and stop engine before making any repairs or adjustments. Disconnect the spark plug wire and keep the wire away from the plug to prevent accidental starting.
16. Before attempting to unclog the mower or discharge chute, stop the engine. The mower blade(s) may continue to rotate for a few seconds after the engine is shut off. Therefore, be sure the blade(s) have stopped completely. Disconnect the spark plug wire and keep the wire away from the plug to prevent accidental starting.
17. Disengage power to attachment(s) when transporting or not in use.
18. For your safety, use the slope gauge included as part of this manual to measure slopes before operating this unit on a sloped or hilly area. If the slope is greater than 15° as shown on the slope gauge, do not operate this unit on that area or serious injury could result.
19. Do not stop or start suddenly when going uphill or downhill. Mow up and down face of steep slopes; never across the face. Use extreme caution if it is necessary to drive the tractor up an incline or back the tractor down an incline because the front of the tractor could lift and rapidly flip over backward which could cause serious injury.
20. Reduce speed on slopes and in sharp turns to prevent tipping or loss of control. Always keep the tractor in low gear when going down steep hills to take advantage of engine braking action. Choose a low enough gear so that you will not have to stop or shift while on the slope.
21. Stay alert for holes in terrain and other hidden hazards which may cause the unit to tip over.
22. Use care when pulling loads or using heavy equipment.
 - A. Use only approved drawbar hitch points.
 - B. Limit loads to those you can safely control.
 - C. Do not turn sharply. Use care when backing.
 - D. Use counterweight(s) or wheel weights when suggested in owner's manual.
23. Watch out for traffic when crossing or near roadways.
24. When using any attachments, never direct discharge of material toward bystanders nor allow anyone near vehicle while in operation.
25. Handle gasoline with care. It is highly flammable.
 - A. Use approved gasoline container.
 - B. Never remove cap or add gasoline to a running or hot engine or fill fuel tank indoors. Wipe up spilled gasoline. Always use original type vented cap.
 - C. Open doors if engine is run in garage. Exhaust fumes are dangerous. Do not run engine indoors.
26. Never store the machine with fuel in the fuel tank inside a building where ignition sources are present, such as hot water and space heaters, clothes dryers, and the like. Allow the engine to cool before storing in any enclosure.
27. To reduce fire hazard, keep engine and cutting deck free of grass, leaves or excessive grease.
28. Keep the vehicle and attachments in good operating condition, and keep safety devices in place. Use guards as instructed in operator's manual.
29. Keep all nuts, bolts, and screws tight to be sure the equipment is in safe working condition.
30. The vehicle and attachments should be stopped and inspected for damage after striking a foreign object. The damage should be repaired before restarting and operating the equipment.
31. Do not change the engine governor settings or overspeed the engine.



Rules for Safe Operation (continued)

32. When using the vehicle with mower, proceed as follows:
 - (1) Mow only in daylight or in good artificial light.
 - (2) Never make a cutting height adjustment while engine is running if operator must dismount to do so.
- (3) Shut the engine off and wait until the blade comes to a complete stop before removing the grass catcher.
- (4) Check blade mounting bolts for proper tightness at frequent intervals.
33. Check grass catcher bags frequently for wear or deterioration. For safety protection, replace only with new bag meeting original equipment specifications.
34. Look behind to make sure the area is clear before placing the transmission in reverse and continue looking behind while backing up. Disengage blades before shifting into reverse and backing up.
35. This unit should not be driven up a ramp onto a trailer or truck under power, because the unit could tip over, causing serious personal injury. The unit must be pushed manually to load properly.
36. Check brake operation frequently. Adjust and service according to brake adjustment instructions in this manual.

ASSEMBLY

IMPORTANT: This unit is shipped WITHOUT GASOLINE or OIL; however, a small amount of oil may be present from the factory. Do not overfill. After assembly, service engine with gasoline and oil as instructed in the engine section of this manual.

NOTE: Reference to right or left hand side of the unit is observed from the driver's seat, facing forward.

BATTERY INFORMATION



WARNING

- A. Battery acid must be handled with great care as contact with it can burn and blister the skin. It is also advisable to wear protective clothing (goggles, rubber gloves and apron) when working with it.*
- B. Should battery acid accidentally splatter into the eyes or onto the face, rinse the affected area immediately with clean cold water. If there is any further discomfort, seek prompt medical attention.
- C. If acid spills on clothing, first dilute it with clean water, then neutralize with a solution of ammonia/water or baking soda/water.
- D. Since battery acid is corrosive, do not pour it into any sink or drain. Before discarding empty electrolyte containers, rinse them with a neutralizing solution.
- E. NEVER connect or disconnect charger clips to battery while charger is turned on as it can cause sparks.
- F. Keep all lighted materials (cigarettes, matches, lighters) away from the battery as the hydrogen gas generated during charging can be combustible.
- G. As a further precaution, only charge the battery in a well-ventilated area.

***Always shield eyes, protect skin and clothing when working near batteries.**

UNPACKING

1. Remove the lawn tractor from the carton as follows. Open the top flaps. Remove all loose parts and carton inserts. Cut the front corners of the carton. Make certain brake is released, and push the unit out of the carton.
2. Remove page four from this manual and lay the contents of the hardware pack on the illustration for identification.

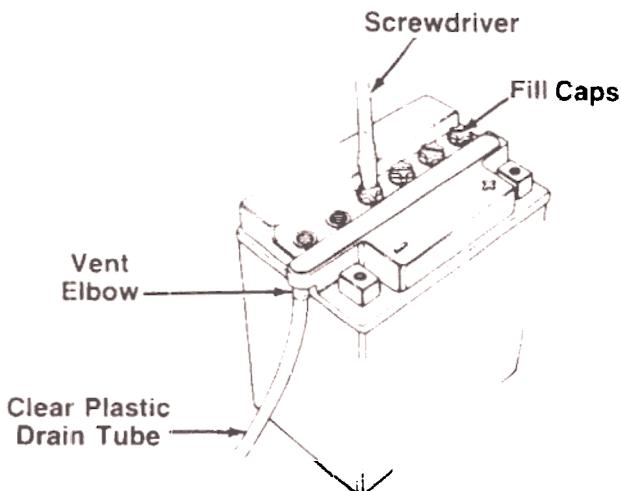


FIGURE 1.

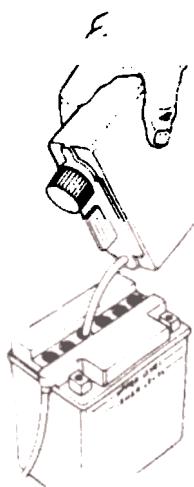


FIGURE 2.



DANGER

Battery contains sulfuric acid. Refer to warning on page 6. Antidote: EXTERNAL—Flush with water. INTERNAL—Drink large quantities of water or milk. Follow with milk of magnesia, beaten eggs or vegetable oil. Call physician immediately. EYES: Flush with cool water for at least 15 minutes, then get prompt medical attention.

Since batteries produce explosive gases, keep all lighted materials (cigarettes, lighters, matches, etc.) away. Be sure to charge battery only in well-ventilated areas. Make certain venting path of battery (drain tube) is always open.

KEEP BATTERIES
OUT OF THE REACH OF CHILDREN!

ACTIVATING THE BATTERY

Do not activate battery (fill with battery acid) until battery is actually placed in service. Be certain to read previous warnings before activating the battery.

1. Open the battery pack. Be careful not to puncture the box. It contains the battery with a long plastic tube attached, battery fluid (acid) in a plastic container, one short plastic tube and one hardware pack (two hex bolts and nuts).
2. Place the battery on a table or workbench. Make certain the long plastic drain tube is in place on the vent elbow.
3. Remove the six fill caps from the top of the battery with a screwdriver. Be careful not to damage the fill caps. See figure 1.
4. Place the battery fluid container on the table or workbench. Carefully cut off tip of the spout and attach the short plastic tube provided. Do not squeeze the container when cutting tip.
5. Fill each battery cell slowly and carefully to the UPPER LEVEL line marked on battery. See figure 2. Use caution as the acid level will rise rapidly after the bottom of the cell is filled.
6. Allow battery to stand for 30 minutes with the fill caps removed, while the plates absorb acid.
7. If acid level has fallen after the 30 minute standing period, refill each cell with battery acid to the UPPER LEVEL line on battery. Replace the fill caps.
8. Before discarding the empty container, neutralize any residue with baking soda and rinse container with water. Puncture container several times before discarding.
9. Charge the battery after the 30 minute standing period. SLOW CHARGE THE BATTERY (DO NOT FAST CHARGE) at a maximum bench rate of 1.4 amperes until the specific gravity reading is 1.260-1.280. Charge for a minimum of 2 hours and a maximum of 8 hours.

NOTE: This engine is equipped with an alternator. The current for the battery charger alternator is unregulated. During normal operation, it is only necessary to charge the battery:

1. When it is activated for the first time.
2. Before winter storage.
3. Before using the lawn tractor after winter storage.

NOTE: Charging rate after battery has been put into operation—the battery is to be charged for a period of 14-16 hours. NO LONGER THAN 30 HOURS.

After battery has been charged, add only distilled water. Do not add acid.

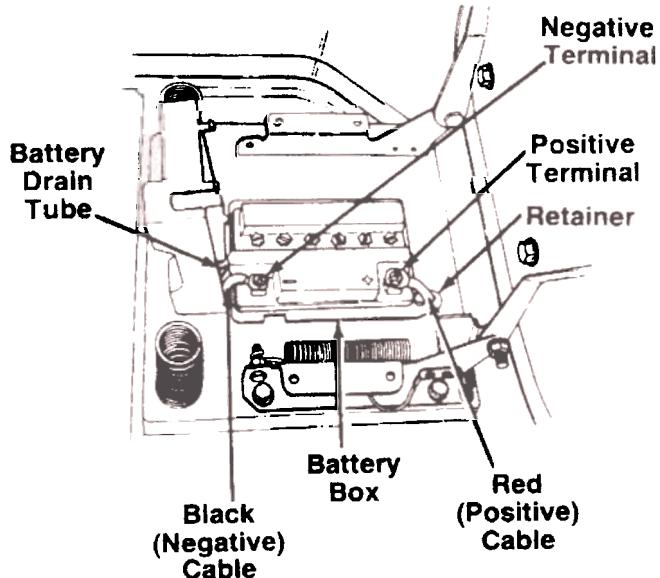


FIGURE 3.

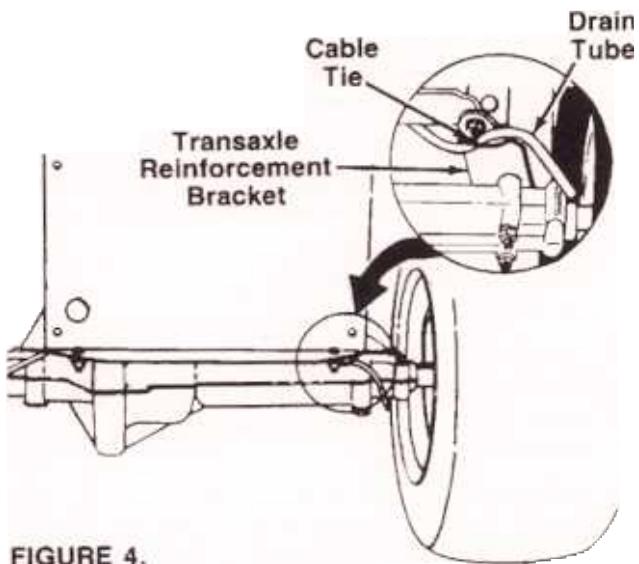


FIGURE 4.

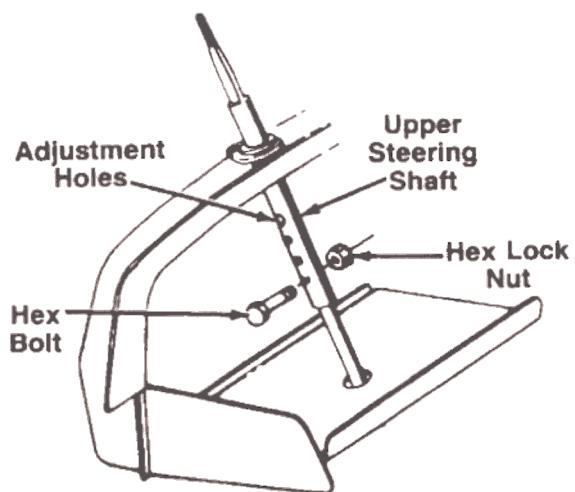


FIGURE 5.

INSTALLING THE BATTERY (Hardware A)

1. Raise the seat bracket (on top of the fenders).
2. Make certain the positive cable (heavy red wire) extends through the retainer on the front of the battery box. The negative cable (heavy black wire) should be routed up along the back of the battery box.
3. Place the battery inside the battery box so that the positive terminal is toward the front of the unit. See figure 3. Route the battery drain tube down beside the battery box.
4. Slide the hex nut (provided with battery hardware) into the positive (+) terminal. Place the positive cable on the positive terminal. Secure with bolt provided. See figure 3.
5. Slide the hex nut (provided with battery hardware) into the negative (-) terminal. Place the negative cable on the negative terminal. Secure with bolt provided.

6. Secure the drain tube to the transaxle reinforcement bracket on the **right** side of the unit, using the cable tie as shown in figure 4. Be certain drain tube is routed away from the wheel rim. Trim excess end of cable tie.
7. Close the top of the battery box and lower the seat.

ATTACHING THE STEERING WHEEL (Hardware B)

1. Open the hood of the lawn tractor by lifting up on both sides of the hood.
2. If not already assembled, insert large end of the upper steering shaft through the hole in the dash panel, over the lower steering shaft. See figure 5. The four holes in the upper steering shaft provide four steering wheel heights. Select desired hole, and secure with hex bolt and hex lock nut.

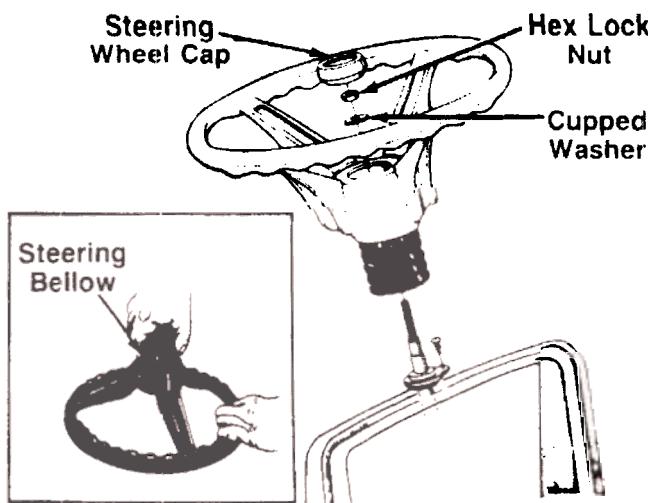


FIGURE 6.

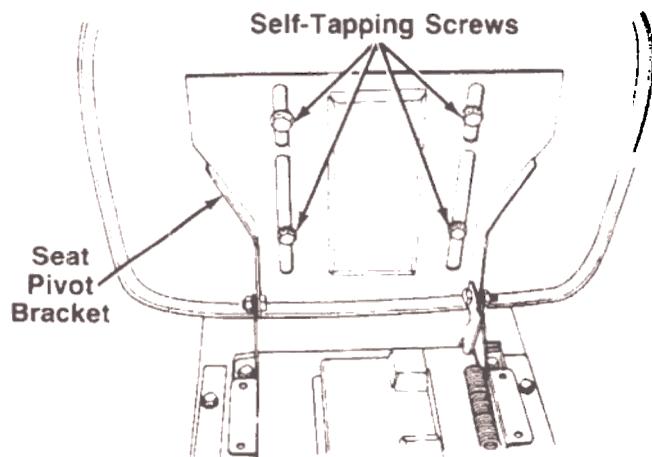


FIGURE 7.

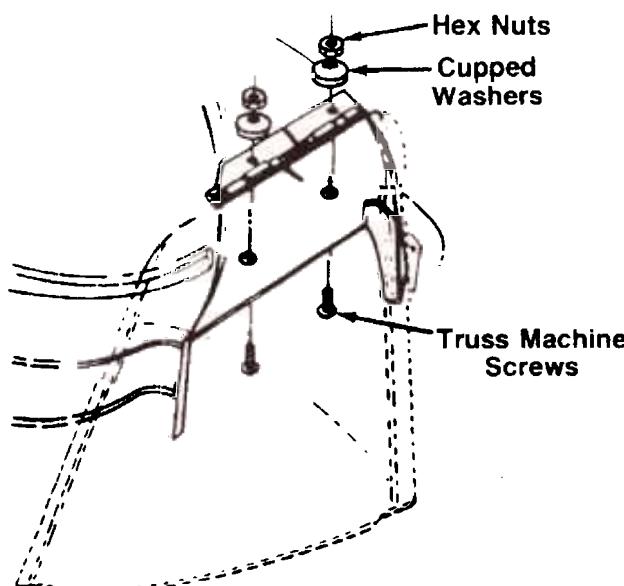


FIGURE 8.

3. Attach one end of steering bellow to the steering wheel as shown in figure 6, inset.
4. Position the front wheels of the tractor so they are pointing straight forward.
5. Place the steering wheel and steering bellow over the steering shaft, positioning steering wheel as desired.
6. Place the washer with the cupped side down over the steering shaft. Secure with 5/16" hex lock nut. — See figure 6.
7. Place the steering wheel cap over the center of the steering wheel and seat it with your hand.

ATTACHING THE SEAT (Hardware C)

Place the seat in position against the seat pivot bracket, lining up the slotted holes in the pivot bracket with the holes in the seat. Select desired position for the seat, and secure with hex self-tapping screws. See figure 7.

ATTACHING THE CHUTE DEFLECTOR



WARNING: Do not operate your unit unless the chute deflector has been properly installed.

1. Remove the truss machine screws, cupped washers and hex jam nuts which are attached to the deck next to the chute opening.
2. Place the chute deflector in position as shown in figure 8. Secure with hardware just removed.

TIRE PRESSURE

The tires on your unit may be over-inflated for shipping purposes. Reduce the tire pressure before operating the unit. Recommended operating tire pressure is approximately 12 p.s.i. (check sidewall of tire for tire manufacturer's recommended pressure).



WARNING: Maximum tire pressure under any circumstances is 30 p.s.i. Equal tire pressure should be maintained on all tires.

CONTROLS

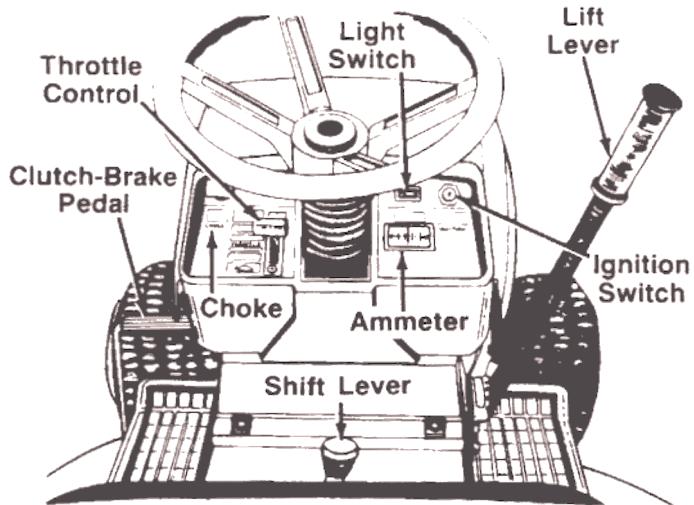


FIGURE 9.

THROTTLE CONTROL

The throttle control is used to regulate the engine speed. To get maximum efficiency from cutting, the throttle should be in the FAST position when operating the mower. See figure 9.

CHOKE CONTROL

The choke control is located on the dashboard and is operated manually. See figure 9.

SHIFT LEVER

The shift lever is located in the center of the console and has three positions, FORWARD, NEUTRAL and REVERSE. See figure 9. The clutch-brake pedal must be depressed and the lawn tractor must not be moving when shifting gears. Do not force the shift lever. Release the clutch-brake pedal slightly to line up the shifting collar in the transmission. Then try to shift gears.

SPEED CONTROL LEVER

The speed control lever allows you to regulate the ground speed of the lawn tractor. See figure 10. To select the ground speed, depress clutch pedal. Push speed control lever outward and move backward to slow lawn tractor, move forward to increase speed. When desired speed has been obtained, release lever in that position. Whenever clutch is engaged, unit will automatically go to the pre-set speed.

IGNITION SWITCH

Turn the key to the START position to start the engine. When the engine is running, let the key return to the ON position. To stop the engine, turn the key to the left to the OFF position and remove it to prevent accidental starting. See figure 9.

LIGHT SWITCH

Push the light switch to turn on the lights. The lights will only operate when the engine is running. See figure 9.

AMMETER

The ammeter registers the rate of battery charge or discharge. The ammeter will register on the discharging side when starting the engine. It should register on the opposite side (charging) when the engine is running in the fast position until the battery is completely charged. With a fully charged battery or with the engine idling, the ammeter will not show a charge. See figure 9.

CLUTCH-BRAKE PEDAL

The clutch-brake pedal is located on the left side of the lawn tractor. Depressing the clutch-brake pedal part way disengages the clutch. Pressing the pedal all the way down disengages the clutch and engages the disc brake. See figure 9.

NOTE: *The clutch-brake pedal must be depressed to start the engine.*

PARKING BRAKE

The speed control lever is used to set the parking brake. To set the parking brake, depress the clutch-brake pedal. Press the speed control lever outward and all the way to the rear of the unit. Release the speed control lever and the clutch-brake pedal.

To release the parking brake, depress the clutch-brake pedal, press the speed control lever outward and move to desired position. Release the speed control lever and the clutch-brake pedal.

NOTE: *The parking brake must be set if the operator leaves the seat with the engine running.*

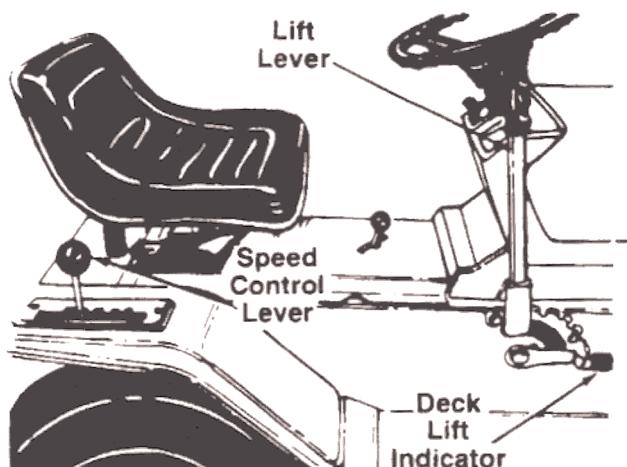


FIGURE 10.

INTERLOCKS (Not Shown)

Interlock safety switches are located by the clutch-brake pedal, the lift lever, the gear shift lever and under the seat.

Before the engine will start, the clutch-brake pedal must be depressed all the way and the lift lever must be in the disengaged position.

Before the unit can be shifted into reverse or if the operator leaves the seat, the lift lever must be in the disengaged position.

CUTTING CONTROLS

A. LIFT LEVER

The lift lever is used to raise and lower the cutting deck and to engage and disengage the blades. Pulling it all the way back and locking it disengages the blades.

CAUTION

- READ OPERATOR'S MANUAL(S) • NEVER CARRY CHILDREN
- KNOW LOCATION AND FUNCTION OF ALL CONTROLS
- KEEP SAFETY DEVICES (GUARDS, SHIELDS AND SWITCHES) IN PLACE AND WORKING
- REMOVE OBJECTS THAT COULD BE THROWN BY BLADE(S)
- DO NOT OPERATE THE UNIT WHEN CHILDREN AND OTHERS ARE AROUND
- ALWAYS LOOK BEHIND THE UNIT BEFORE BACKING UP
- DO NOT OPERATE THE UNIT WHERE IT COULD SLIP OR TIP
- IF THE UNIT STOPS GOING UPHILL, STOP BLADE(S) AND BACK SLOWLY DOWNHILL
- BE SURE BLADE(S) AND ENGINE ARE STOPPED BEFORE PLACING HANDS OR FEET NEAR BLADE(S)
- BEFORE LEAVING OPERATOR'S POSITION, DISENGAGE THE BLADE(S). PLACE THE SHIFT LEVER IN NEUTRAL, ENGAGE THE PARKING BRAKE, SHUT ENGINE OFF AND REMOVE THE KEY

STARTING THE ENGINE

NOTE: To open the hood, simply lift up on both sides of the hood.

1. Service the engine with oil and gasoline as described in the engine section of this manual.
2. Depress the clutch-brake pedal and set the parking brake.
3. Place the lift lever in the DISENGAGED position. See figure 10.

IMPORTANT: This unit is equipped with a **safety interlock system** for your protection. The purpose of the safety interlock system is to prevent the engine from cranking or starting unless the clutch-brake pedal is depressed and the lift lever is in the disengaged position. In addition, the lift lever must be in the disengaged position when the unit is put into reverse or the engine will shut off. If the operator leaves the seat with the lift lever engaged and/or without setting the parking brake, the engine will shut off.

NOTE: The lift lever **must** be in the disengaged position when starting the engine, when shifting into reverse and if the operator leaves the seat. See figure 10.

B. DECK LIFT INDICATOR

The deck lift indicator marks the position being used for the lift lever. Select the lift lever position desired, press the indicator lever outward, move it to the position immediately below the lift lever and release the indicator lever. See figure 10.

C. SETTING THE CUTTING HEIGHT

1. Select the position for the lift lever which gives the desired cutting height. Move the deck lift indicator so that the lift lever can be returned to the same position after it is raised.
2. Set the deck wheels so the wheels are $\frac{1}{4}$ to $\frac{1}{2}$ inch above the ground.

OPERATION



WARNING: Do not operate the lawn tractor if the interlock system is malfunctioning because it is a safety device, designed for protection.

4. Set the throttle control in the FAST position. See figure 9.
5. Pull out choke knob to choke engine (a warm engine may not require choking).
6. Turn the ignition key to the START position. When the engine is running, let the key return to the ON position. See figure 9.
7. Push choke knob in gradually. Move the throttle control to desired engine speed.

STOPPING THE ENGINE

Turn the ignition key to the left to the OFF position. Remove the key to prevent accidental starting.

IMPORTANT: If you strike a foreign object, stop the engine. Remove wire from spark plug, thoroughly inspect the unit for any damage, and repair the damage before restarting and operating the mower.

NOTE: If any problems are encountered, refer to the Trouble Shooting Chart on page 24.

OPERATING THE LAWN TRACTOR

1. Set the desired cutting height.
2. Start the engine as instructed on this page.
3. Move throttle control to $\frac{3}{4}$ or full throttle to prevent strain on the engine and to operate the cutting blades.
4. Place the shift lever in either the FORWARD or REVERSE position.



WARNING: Look to the rear before backing up.

5. Release the parking brake by depressing the clutch-brake pedal, pressing outward on the speed control lever and moving to desired position. Use first speed position when operating the lawn tractor for the first time.
6. Release clutch-brake pedal slowly to put unit into motion.
7. The lawn tractor is brought to a stop by depressing the clutch-brake pedal.

NOTE: When operating the unit initially, there will be little difference between the highest two speeds until after the belts have seated themselves into the pulleys during the break-in period.

Be sure that the lawn is clear of stones, sticks, wire, or other objects which could damage lawn mower or engine. For best results and to insure more even grass distribution, do not mow when lawn is excessively wet.



WARNING: Before leaving the operator's position for any reason, disengage the blades, place the shift lever in neutral, engage the parking brake, shut engine off and remove the key.

When stopping the unit to empty a grass bag, etc., follow the instructions above. This procedure will also eliminate "browning" the grass, which is caused by hot exhaust gases from a running engine.

If unit stalls with speed control in high speed, or if unit will not operate with speed control lever in a low speed position, proceed as follows.

1. Place shift lever in NEUTRAL.
2. Restart engine.
3. Place speed control lever in high speed position.
4. Release clutch-brake pedal fully.
5. Depress clutch-brake pedal.
6. Place speed control lever in desired position.
7. Place shift lever in either FORWARD or REVERSE, and follow normal operating procedures.

OPERATING THE CUTTING BLADES

The cutting blades may be engaged while the lawn tractor is moving or standing still. DO NOT engage the cutting blades abruptly as the sudden belt tension on the pulley may cause the engine to stall.



WARNING: Keep feet and hands away from the discharge opening, the blades or any part of the deck. When the unit is used for other than mowing operations, the blade drive should be disengaged.

Move the lift lever into the DISENGAGED position to raise the deck and disengage the blades.

GRASS CATCHER Stock Number 95-1136-1 (Factory No. 190-064) is available as optional equipment.



WARNING: The mower should not be operated without the entire grass catcher or chute deflector in place.

NOTE: Under normal usage bag material is subject to wear, and should be checked periodically. Be sure any replacement bag complies with the mower manufacturer's recommendations.

For replacement bags, use only factory authorized replacement bag.

ADJUSTMENTS

SEAT ADJUSTMENT

The seat may be adjusted to different positions. Refer to seat installation section of assembly instructions.

STEERING WHEEL ADJUSTMENT

There are four height positions for the steering wheel. To adjust the height of the steering wheel, remove the hex bolt and hex lock nut on the steering shaft. Place the steering wheel in the position desired and secure with hex bolt and hex lock nut. Refer to figure 5.

NOTE: When raising the height of the steering wheel, stretch the steering bellow to cover the steering shaft.

DECK LEVELING ADJUSTMENT

If an uneven cut is obtained, the deck may be leveled as follows.

With unit on hard, level surface, measure the distance from the bottom edge of the center of the left side of deck to the ground. Measure the same distance on the center of the right side of the deck (just behind the chute area on side discharge units). Or, place the blades in a straight line, and measure the distance from the outside edge of the blade tips to the ground.

Adjust the lift link on the left side of the deck as necessary. See figure 11. Recheck the adjustment.

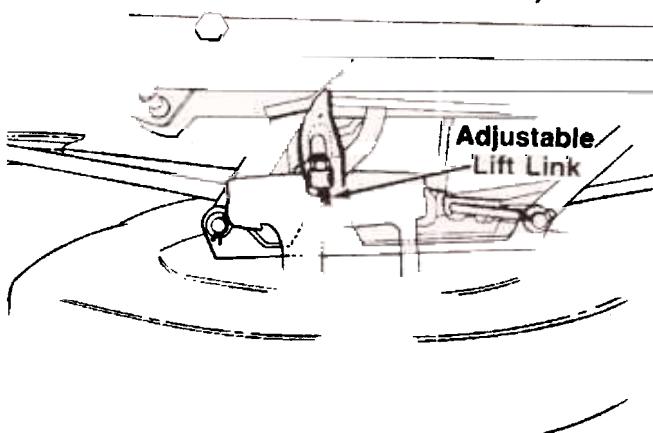


FIGURE 11.

SPEED CONTROL ADJUSTMENT (See figure 12)

NOTE: When operating the unit initially or after replacing the belts, there will be little difference between the highest two speeds until after the belts have gone through a break-in period and have seated themselves into the pulleys.

First, adjust the speed control lever by pushing the clutch-brake pedal forward until the stop on the brake rod is against the frame. See figure 12. Have another person hold the pedal in this position as you make the following adjustment. Place the speed control lever in parking brake position. Remove the hairpin clip and flat washer, and adjust the ferrule on the rod so it is against the back end of the slot. See figure 12. Replace the flat washer and hairpin clip.

Next, adjust the speed control link as follows to obtain the correct neutral adjustment.

1. Start the engine.
2. Place the shift lever in Neutral position.
3. Place the speed control lever in high speed position.
4. Release the clutch-brake pedal completely, then slowly depress the pedal all the way (to park position). Hold the pedal in this position.
5. Turn the engine off.
6. After engine stops completely, release the clutch-brake pedal.

7. Place speed control lever in first position.

8. Remove the cotter pin and flat washer which secures the speed control link to the variable speed torque bracket assembly.

9. Push the clutch-brake pedal backward by hand as far as it will go using light pressure. Hold it in this position as you thread the speed control link in or out of the ferrule until it lines up with the pin on the variable speed torque bracket assembly.

10. Secure speed control link to variable speed torque bracket assembly with flat washer and cotter pin.

NEUTRAL ADJUSTMENT

1. Place the transmission in neutral. (The unit will move freely when pushed forward and backward with the parking brake released.)
2. Loosen the bolt which secures the shift lever assembly to the shift lever link. See figure 13.
3. Place the shift lever in the natural slot. See figure 13.
4. Tighten the bolt to 13 foot pounds.

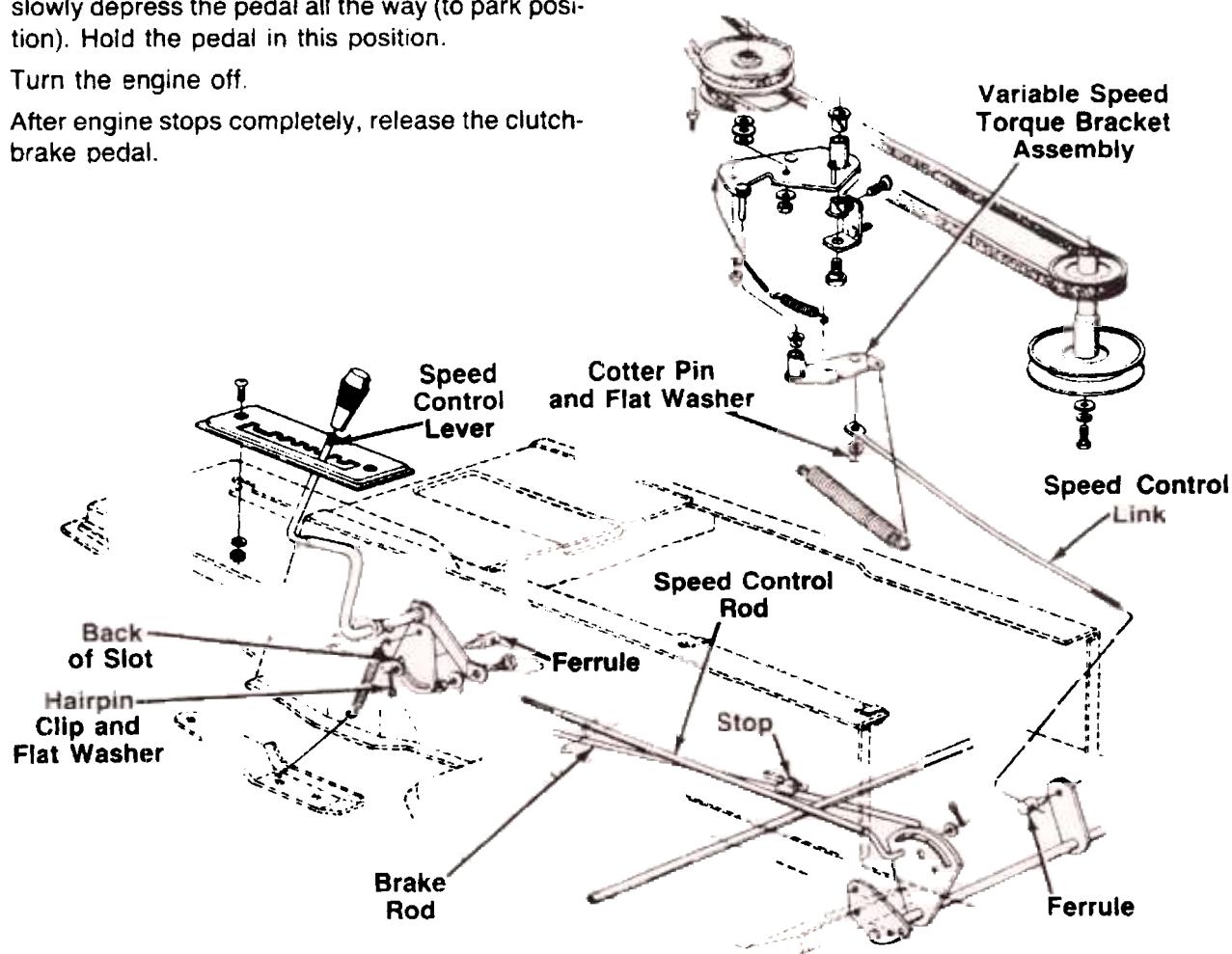


FIGURE 12.

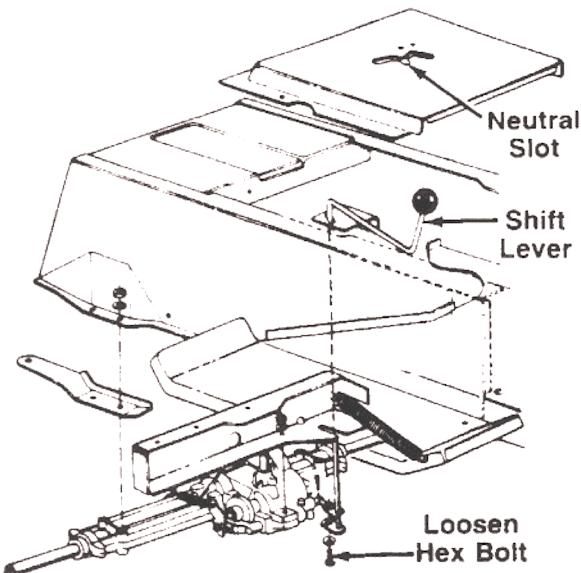


FIGURE 13.

WHEEL ADJUSTMENT

The caster (forward slant of the king pin) and the camber (tilt of the wheels out at the top) require no adjustment. Automotive steering principles have been used to determine the caster and camber on the tractor. The front wheels should toe-in 1/8 inch.

To adjust the toe-in, follow these steps.

1. Remove the hex nut and lock washer, and drop the tie rod end from the wheel bracket. See figure 14.
2. Loosen the hex jam nut on tie rod.
3. Adjust the tie rod assembly for correct toe-in.

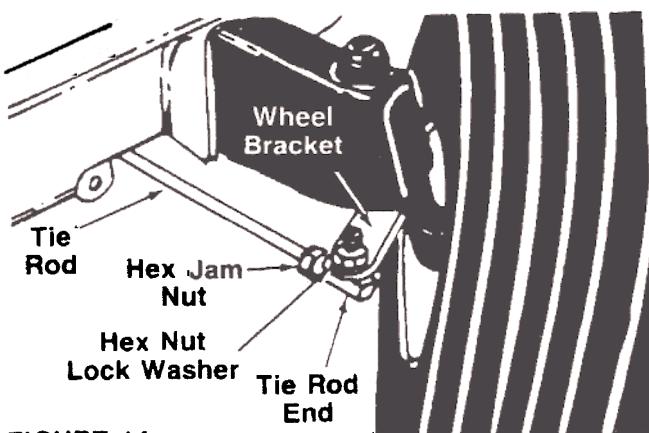


FIGURE 14.

Dimension "B" should be approximately 1/8" less than Dimension "A." See figure 15.

- A.) To increase Dimension "B," screw tie rod into tie rod end.
- B.) To decrease Dimension "B," unscrew tie rod from tie rod end.
- C.) Reassemble tie rod. Check dimensions. Readjust if necessary.

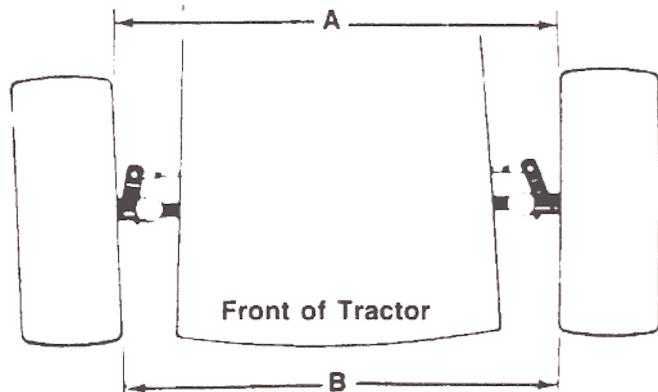


FIGURE 15.

BRAKE ADJUSTMENT (See figure 16)

The brake is located by the right rear wheel inside the frame. During normal operation of this machine, the brake is subject to wear and will require periodic examination and adjustment.



WARNING: Do not have the engine running when you adjust the brake.

To adjust the brake, remove the cotter pin. Adjust the castle nut so the brake starts to engage when the brake lever is 1/4" to 5/16" away from the axle housing.

NOTE: Figure 16 is shown with the unit tipped up on rear wheels for clarity only.

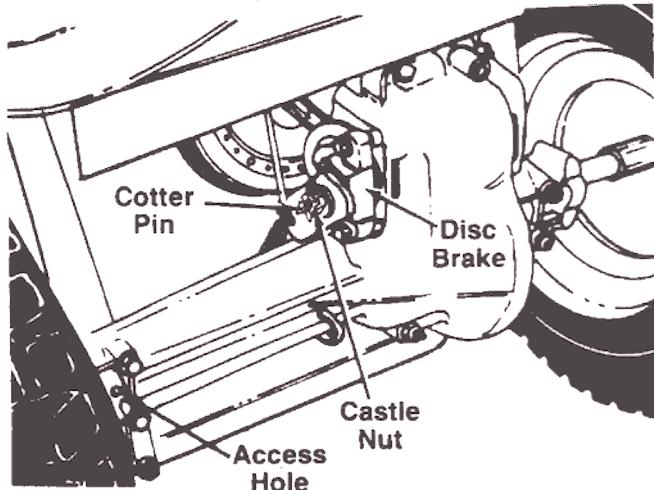


FIGURE 16.

LUBRICATION



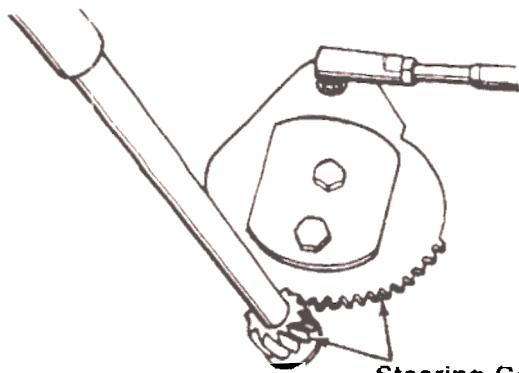
WARNING: Always stop engine and disconnect spark plug wire before cleaning, lubricating or doing any kind of work on lawn tractor.

STEERING GEARS

Lubricate teeth of steering gears with automotive multi-purpose grease after every 25 hours of operation or once a season. See figure 17.

STEERING SHAFT

Lubricate steering shaft at least once a season with light oil.



Steering Gears

FIGURE 17.

VARIABLE SPEED PULLEY

Lubricate needle bearings inside the variable speed pulley with light oil once a season. Also lubricate the bearings inside the pulley by putting a small amount of light oil on the shaft. Then start the tractor, and with the shift lever in neutral, move the speed selector forward and backward which will move the center sheave and distribute the oil on the shaft. Be careful not to get oil on the sheaves of the pulleys or on the belts, which could cause the belts to slip.

TRANSAXLE

The transaxle is lubricated at the factory and does not require checking. If disassembled for any reason, lubricate with 10 oz. of Shell grease, part number 737-0148 (16 oz. package).

The rear axles may be lubricated once a season, using the access hole on each side of the transaxle housing. See figure 16. A push-type hand grease gun, equipped with a special flush coupler is required. Use Shell grease, part number 737-0148 (16 oz. package).

WHEELS

The front wheels are provided with grease fittings. The rear wheels must be removed from the axle for lubrication. Lubricate both front and rear wheels at least once a season with automotive multi-purpose grease.

PIVOT POINTS

Lubricate all pivot points with light oil at least once a season.



WARNING: Disconnect the spark plug wire and ground against the engine before performing any repairs or maintenance.

TROUBLE SHOOTING

Refer to page 24 of this manual for trouble shooting information.

ENGINE

Refer to the engine section of this manual for all engine maintenance instructions.

CLEANING ENGINE AND BLADE HOUSING

Any fuel or oil spilled on the machine should be wiped off promptly. Grass, leaves, and other dirt must not be left to accumulate around the cooling fins of the engine or on any part of the machine.

Clean the underside of the blade housing after each mowing.

CUTTING BLADES

A. Removal for Sharpening or Replacement



WARNING: Be sure to disconnect and ground the spark plug wire and remove ignition key before working on the cutting blade to prevent accidental engine starting. Protect hands by using heavy gloves or a rag to grasp the cutting blades.

1. Remove the large bolt and lock washer which holds the blade and adapter to the blade spindle.
2. Remove the blade and adapter from the spindle.
3. If the blade or blade adapter needs replacing, remove the two small bolts, lock washers and nuts which hold the blade to the adapter.

B. Sharpening

Remove the cutting blades by following the directions of the preceding section.

When sharpening the blades, follow the original angle of grind as a guide. It is **extremely important** that each cutting edge receives an equal amount of grinding to prevent an unbalanced blade. An unbalanced blade will cause excessive vibration when rotating at high speeds, may cause damage to the mower and could break, causing personal injury.

The blade can be tested for balance by balancing it on a round shaft screwdriver. Remove metal from the heavy side until it balances evenly.

NOTE: It is recommended that the blade always be removed from the adapter for the best test of balance.

C. Reassembly

Before reassembling the blade and the blade adapter to the unit, lubricate the spindle and the inner surface of the blade adapter with light oil. Lubricating the bolt holes, bolts and inner surface of the nuts with light oil is also recommended. A 4 oz. plastic bottle of light oil lubricant is available. Order part number 737-0170. Engine oil may also be used.

When replacing blades, be sure to install the blade with the side of the blade marked "Bottom" (or with part number) facing the ground when the mower is in the operating position.

Blade Mounting Torque

3/8" Dia. Bolt 375 in. lb. min., 450 in. lb. max.

5/16" Dia. Bolt 150 in. lb. min., 250 in. lb. max.

To insure safe operation of your unit, ALL nuts and bolts must be checked periodically for correct tightness.

FUEL FILTER

Your unit is equipped with a replaceable in-line fuel filter. Replace filter whenever contamination or discoloration is noticed. Order replacement filter through participating Western Auto Stores.

BELT REMOVAL AND REPLACEMENT



WARNING: Disconnect the spark plug wire and ground it against the engine. Block the wheels of the unit.

NOTE: Figures 18 and 22 through 24 are shown with the unit tipped up for clarity. It is not necessary to tip the unit to remove the belts.

However, if tipping the unit is desired, remove the battery from the unit. To prevent gasoline leakage, drain the gasoline, or remove the fuel tank cap, place a thin piece of plastic over the neck of the fuel tank and screw on the cap. Be certain to remove the plastic when finished changing the belts. Block unit securely.

Deck Belt Removal and Replacement

1. Place the lift lever in the disengaged position.
2. Remove the hex bolts (belt keepers) from the engine pulley belt guard. See figure 18.

NOTE: When reassembling, make certain hex bolts are assembled in the same locations from which they were removed. See figure 18.

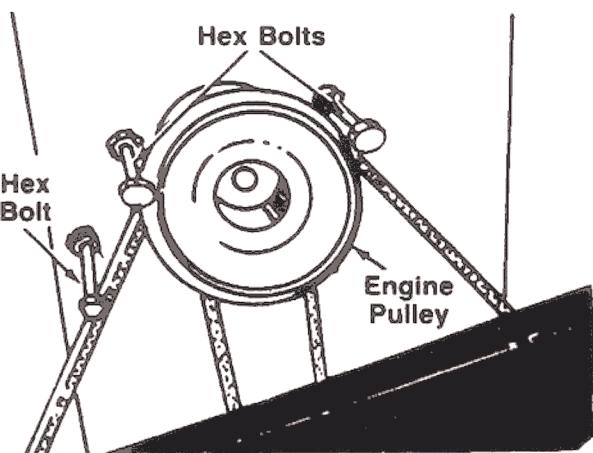


FIGURE 18.

3. Unhook the deck belt from the engine pulley.
4. Place the lift lever in the engaged (all the way forward) position.

5. Disconnect the spring which is attached to a bracket on the transaxle, inside the left rear wheel. Use a spring puller or other suitable tool.
6. Disconnect the six deck links by removing the hairpin clips and flat washers.
7. Disconnect the stabilizer plate from the stabilizer shaft assembly by removing the hairpin clips and flat washers and sliding out the rod.
8. Place the lift lever in the disengaged position.
9. Slide the deck from beneath the lawn tractor.
10. Remove the belt guards at each deck pulley by removing the hex bolts, lock washers and hex nuts. See figure 19.

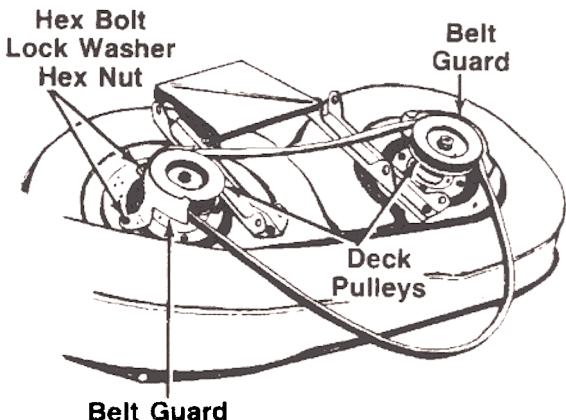


FIGURE 19.

11. Remove and replace the belt, reassemble following the instructions in reverse order.

Rear Drive Belt

1. Place shift lever in neutral position. Unscrew the shift knob. Remove the two truss head screws which secure the transmission cover. See figure 20A.
2. Lift the transmission cover. Unplug the safety wire from beneath the transmission cover. See figure 20B. Remove transmission cover.

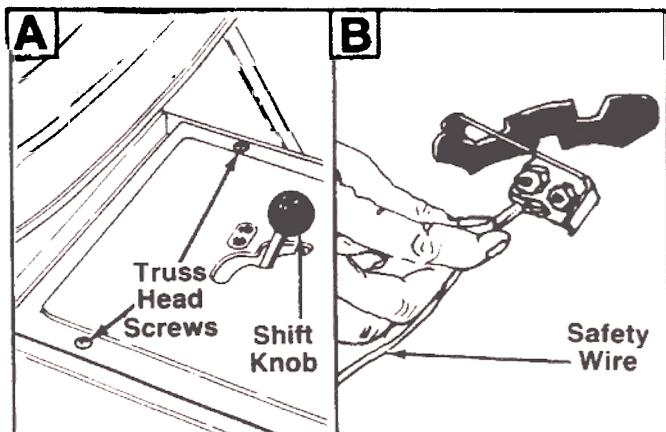


FIGURE 20.

- Push the idler pulley toward the right side of the unit. Lift the belt over the idler pulley. See figure 21.
- Remove the belt from the variable speed pulley.
- Remove the two bolts which hold the shift lever bracket to the frame on the left side of the unit. Swing the bracket toward the right so the belt can be removed from the transmission pulley. See figure 21.
- Replace belt, and reassemble in reverse order.

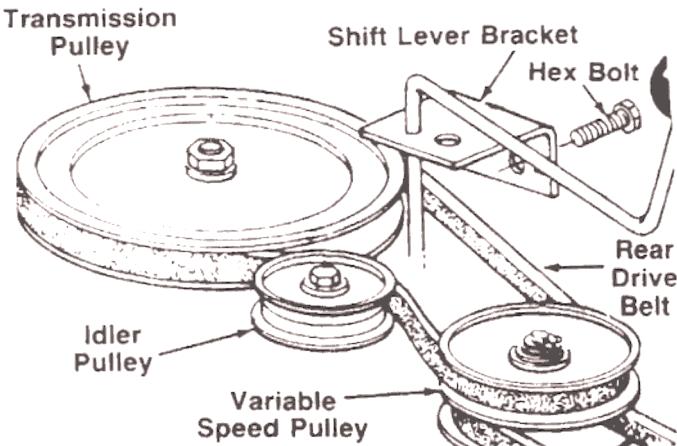


FIGURE 21.

Front Drive Belt

- To remove the front drive belt, first remove the rear drive belt from the idler pulley and variable speed pulley.
- Place the lift lever in the disengaged position.
- Remove the three hex bolts (belt keepers) from the engine pulley belt guard. Refer to figure 18.

NOTE: Make certain hex bolts are reassembled as shown in figure 18.

- Unhook the deck belt from the engine pulley.
- Remove the two bolts, lock washers and nuts on each side of the frame which hold the engine pulley belt guard to the frame. See figure 22.

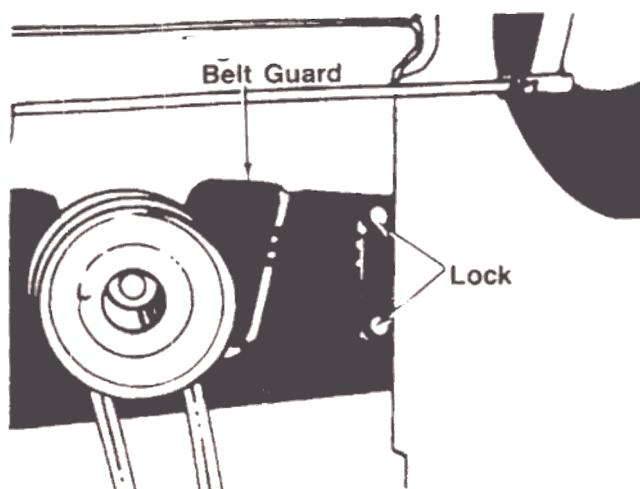


FIGURE 22.

- Remove the engine pulley belt guard by slipping it back and to the right. See figure 23.

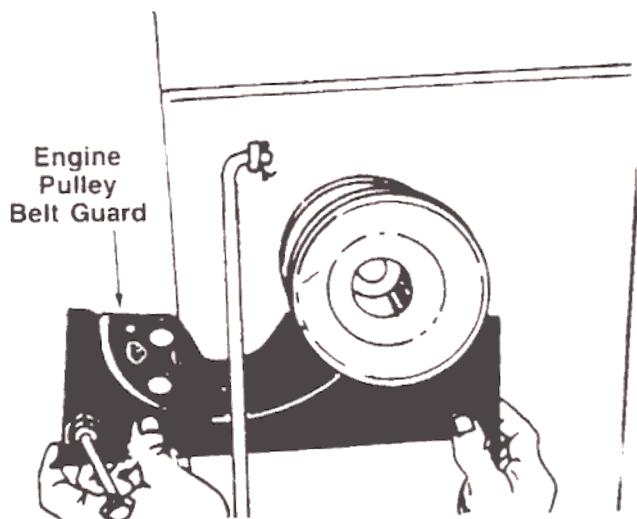


FIGURE 23.

- Place the clutch-brake pedal in park position.
- Push forward on the variable speed pulley, and lift the belt off the engine and remove the belt from the engine pulley.
- Release the clutch-brake pedal. Using the pedal to move the variable speed pulley as necessary, lift the belt up and off the variable speed pulley.

NOTE: When reassembling, make certain belt is inside the pins. See figure 24.

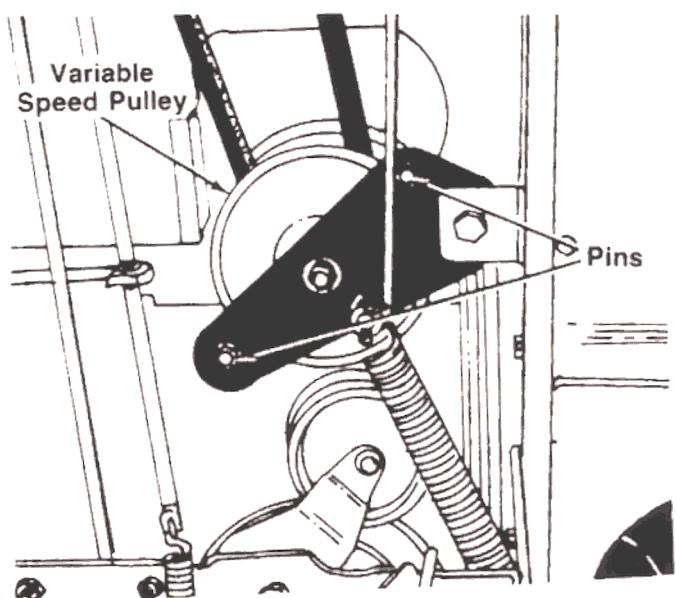


FIGURE 24.

- Reassemble with a new belt, following instructions in reverse order.

BATTERY REMOVAL OR INSTALLATION



WARNING: When removing the battery, follow this order of disassembly to prevent the screwdriver from shorting against the frame.

1. Remove the Negative cable.
2. Remove the Positive cable.

To install a battery:

1. Attach the Positive cable.
2. Attach the Negative cable.

JUMP STARTING

1. Attach the first jumper cable from the Positive terminal of the good battery to the Positive terminal of the dead battery.
2. Attach the second jumper cable from the Negative terminal of the good battery to the FRAME OF THE UNIT WITH THE DEAD BATTERY.



WARNING: Failure to use this starting procedure could cause sparking, and the gas in either battery could explode.

BATTERY MAINTENANCE

1. Check periodically (every two weeks or before and after charging) to be sure electrolyte level is above the lowest line on battery. Add only distilled water or a good quality drinking water. NEVER add additional acid or other chemicals to battery after initial activation.
2. The battery should be checked with a hydrometer after every 25 hours of operation. If the specific gravity is less than 1.225, remove battery and recharge.
3. Coat the terminals and exposed wiring with a thin coat of grease or petroleum jelly for longer service and protection against electrolyte corrosion.
4. The battery should be kept clean. Any deposits of acid should be neutralized with soda and water. Be careful not to get this solution in the cells.

BATTERY STORAGE

1. Charge battery using normal methods. NEVER store discharged battery as it will not recover.
2. When storing battery for extended periods, disconnect battery cables. Removing battery from unit is recommended.
3. Store in cold, dry place.
4. Recharge battery whenever the specific gravity is less than 1.225, before returning to service, or every two months, whichever occurs first.

COMMON CAUSES FOR BATTERY FAILURE ARE:

1. Overcharging
2. Undercharging
3. Lack of water
4. Loose holds downs and/or corroded connections
5. Excessive loads
6. Battery electrolyte substitutes
7. Freezing of electrolyte

NOTE: THESE FAILURES DO NOT CONSTITUTE WARRANTY.

TIRES

Recommended operating tire pressure is approximately 12 p.s.i. (check sidewall of tire for tire manufacturer's recommended pressure). Maximum tire pressure under any circumstances is 30 p.s.i. Equal tire pressure should be maintained on all tires.

When installing a tire to the rim, be certain rim is clean and free of rust. Lubricate both the tire and rim generously. Never inflate to over 30 p.s.i. to seat beads.



WARNING: Excessive pressure (over 30 p.s.i.) when seating beads may cause tire/rim assembly to burst with force sufficient to cause serious injury.

OFF-SEASON STORAGE

If the machine is to be inoperative for a period longer than 30 days, prepare for storage as follows.

1. Clean the engine and the entire unit thoroughly.
2. Lubricate all lubrication points. Wipe the entire machine with an oiled rag to protect the surfaces.
3. Refer to the engine section of this manual for correct engine storage instructions. The engine must be completely drained of fuel to prevent gum deposits from forming on essential carburetor parts, fuel lines and fuel tanks.
4. Refer to battery storage instructions on this page.
5. Store unit in a clean, dry area.

NOTE: When storing any type of power equipment in an unventilated or metal storage shed, care should be taken to rustproof the equipment. Using a light oil or silicone, coat the equipment, especially any chains, springs, bearings and cables.

ENGINE OPERATING AND MAINTENANCE INSTRUCTIONS

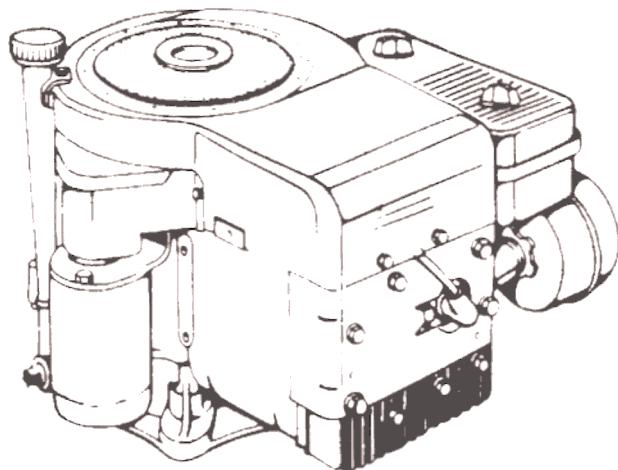
FOR ENGINE MODEL 281707-0411-01

IMPORTANT: Do not start the engine before reading the following section of this manual.



WARNING: Do not operate engine in an enclosed area. Exhaust gases contain carbon monoxide, an odorless and deadly poison.

Always remove ignition key and disconnect spark plug wire from spark plug before performing any repairs or maintenance.



SECTION 1 BEFORE STARTING

Fill Sump With Oil—Use a high quality detergent oil classified "For Service SF, SE, SD or SC." Nothing should be added to the recommended oil.

Place engine level. Clean area around oil fill before removing oil dipstick.

Remove oil dipstick. Fill to full mark on dipstick. **Pour slowly.** Capacity approximately 3 pints; however, a small amount of oil may be present from the factory. When checking oil level, screw dipstick assembly firmly but slowly until cap bottoms on tube. **Do not overfill** or excessive smoking may occur when engine is running. Dipstick assembly must be securely assembled to tube at all times when engine is operating.

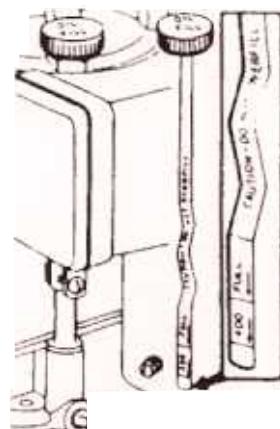
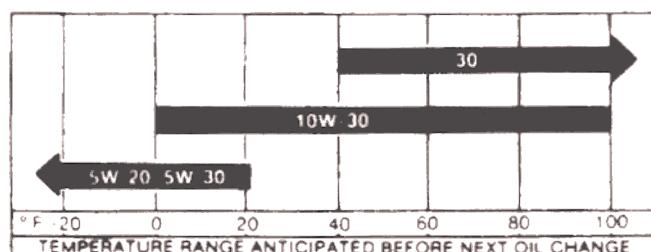
NOTE: Be certain to fill only to the full mark on the dipstick. Do not overfill.

Fill Fuel Tank—The engine will operate satisfactorily on any gasoline intended for automotive use. DO NOT MIX OIL WITH GASOLINE.

The use of clean, fresh, **lead-free** gasoline is recommended. Leaded gasoline may be used if lead-free is not available. A minimum of 77 octane is recommended. The use of lead-free gasoline results in fewer combustion deposits and longer valve life.

Do not fill fuel tank to point of overflowing. Allow tank space for fuel expansion.

Recommended SAE Viscosity Grades



SECTION 2 STARTING



WARNING: ALWAYS KEEP HANDS AND FEET CLEAR OF MOWER BLADE OR OTHER ROTATING PARTS.

To Start Engine

1. Depress the clutch-brake pedal and set the parking brake.
2. Place the lift lever in the DISENGAGED position.
3. Set the throttle control in the FAST position.
4. Pull choke knob out to choke engine.

NOTE: A warm engine requires less choking than a cold engine.

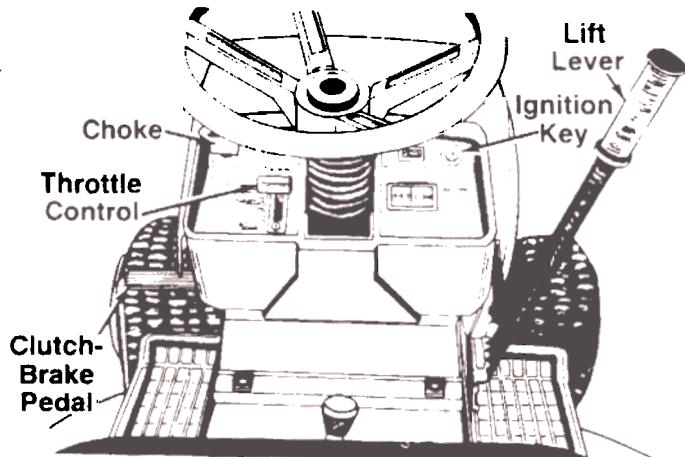
5. Turn the ignition key to the START position. When the engine is running, let the key return to the ON position.

NOTE: The best starter life is provided by using short starting cycles of several seconds. Prolonged cranking can damage the starter motor if cranked more than 15 seconds per minute.

6. Push choke knob in gradually. Move the throttle control to desired engine speed.

To Stop Engine—Turn ignition key to OFF position.

CAUTION: Always remove key from switch when leaving equipment unattended or when equipment is not in use.



Cold Weather Starting Tips

1. Be sure to use the proper oil for the temperature expected.
2. Declutch all possible external loads.
3. Set throttle control at part-throttle position.
4. A slightly richer fuel mixture, obtained by turning carburetor needle valve 1/8 turn counterclockwise, will usually improve cold starting.
5. A warm battery has much more starting capacity than a cold battery.
6. Use fresh winter grade fuel. (Winter grade gasoline has higher volatility to improve starting. Do not use gasoline left over from summer.)

SECTION 3 REGULAR MAINTENANCE



WARNING: TO PREVENT ACCIDENTAL STARTING when performing any maintenance or repairs, always disconnect spark plug wire from spark plug and ground against the engine.

Check Oil Level after each five hours of operation. BE SURE PROPER OIL LEVEL IS MAINTAINED.

Change Oil after first five hours of operation. Thereafter change engine oil every 50 hours, under normal operating conditions. Change engine oil every 25 hours of operation if the engine is operated under heavy load, or in high ambient temperatures. Change oil while engine is warm. Oil may be drained through oil drain plug on side of engine.

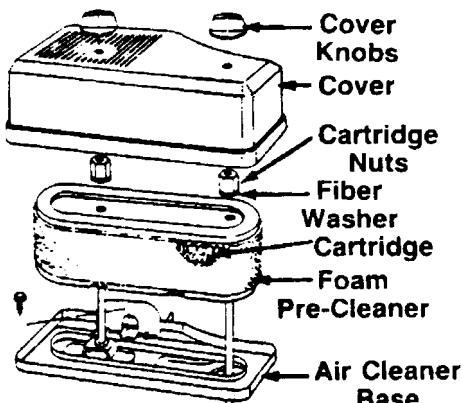
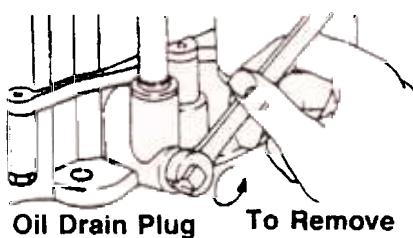
Air Cleaner

Service air cleaner at three month intervals or every 25 hours, whichever occurs first.

NOTE: Service air cleaner more often under dusty conditions.

To Service Air Cleaner:

1. Remove two cover knobs and remove air cleaner cover.



- 2 Remove foam pre-cleaner.
 - a. Wash pre-cleaner in liquid detergent and warm water to remove dirt.
 - b. Wrap pre-cleaner in cloth and squeeze dry.
 - c. **Saturate foam in engine oil.** Squeeze to remove excess oil.
3. Remove two nuts from top of cartridge.
4. Remove cartridge and clean air cleaner body carefully to prevent dirt from entering carburetor. Brush dirt from lower air cleaner body into duct.
5. Clean cartridge by tapping gently on flat surface.
 - a. If very dirty, replace cartridge or wash in a low or non-sudsing detergent and warm water solution.
 - b. Rinse thoroughly from **inside out** until water is clear.
 - c. Cartridge must be allowed to stand and air dry **thoroughly** before using.
6. Reassemble air cleaner.

Caution: Petroleum solvents, such as kerosene, are not to be used to clean cartridge. They may cause deterioration of the cartridge. **Do not oil cartridge. Do not use pressurized air to clean or dry cartridge.**

Clean Engine—Remove dirt and debris with a cloth or brush. Cleaning with a forceful spray of water is not recommended as water could contaminate the fuel system.

Clean Cooling System—Grass, chaff or dirt may clog the rotating screen and the air cooling system, especially after prolonged service in cutting tall dry grasses. Yearly or every 100 hours, whichever occurs first, remove the blower housing and clean the areas shown to avoid overspeeding, overheating and engine damage. Clean more often if necessary.



WARNING: Periodically clean muffler area to remove all grass, dirt and combustible debris.

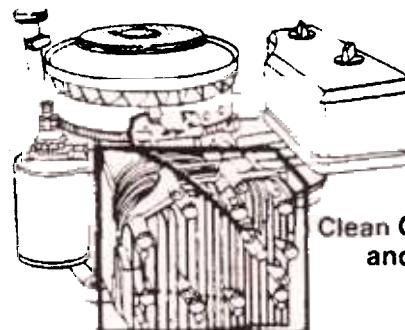
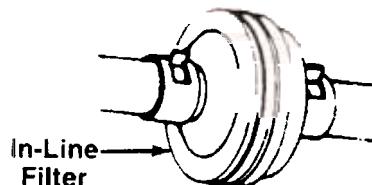
Spark Plug—Clean and reset gap at .030" every 100 hours of operation.

NOTE: Do not blast clean spark plug. Spark plug should be cleaned by scraping or wire brushing and washing with a commercial solvent.

Caution: Sparking can occur if wire terminal does not fit firmly on spark plug. Reform terminal if necessary.

Spark Arrester Equipped Muffler—If engine muffler is equipped with spark arrester screen assembly, remove every 50 hours for cleaning and inspection. Replace if damaged.

Fuel Filter—Replace in-line fuel filter every season.



Clean Out Chaff and Dirt

Remove Combustion Deposits every 100-300 hours of operation. Remove cylinder head and cylinder head shield. Scrape and wire brush the combustion deposits from cylinder, cylinder head, top of piston and around valves. Use a soft brush to remove deposits. Re-assemble gasket, cylinder head and cylinder head shield. Torque cylinder head screws in a staggered sequence to 140 inch pounds (15.82 Nm).

SECTION 4 ADJUSTMENTS

CARBURETOR ADJUSTMENT

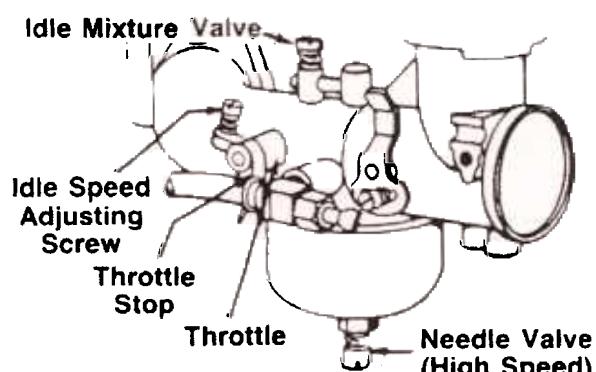


WARNING: If any adjustments are made to the engine while the engine is running (e.g. carburetor), disengage clutches and blades. Keep clear of all moving parts. Be careful of heated surfaces and muffler.

Minor carburetor adjustment may be required to compensate for differences in fuel, temperature, altitude or load.

NOTE: The air cleaner must be assembled to carburetor when running engine.

To Adjust Carburetor—Gently turn valves clockwise



until they just close. Valves may be damaged by turning them too far.

Now open needle valve 1-1/2 turns counterclockwise and idle valve one turn. This initial adjustment will permit the engine to be started and warmed up approximately 5 minutes prior to final adjustment.

Final Adjustment—Place speed control lever in FAST position. Turn needle valve in until engine slows (clockwise—lean mixture). Then turn it out past smooth operating point (rich mixture). Now turn needle valve to midpoint between rich and lean. Next, adjust idle RPM. Rotate throttle counterclockwise and hold against stop while adjusting idle speed adjusting screw to obtain 1750 RPM. Holding throttle against idle stop, turn idle valve in (lean) and out (rich). Set at midpoint between rich and lean. Recheck idle RPM. Release throttle. If engine will not accelerate properly, the carburetor should be re-adjusted, usually to a slightly richer mixture.

CONTROL ADJUSTMENTS

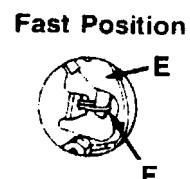
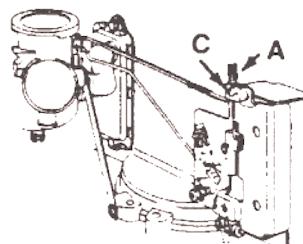
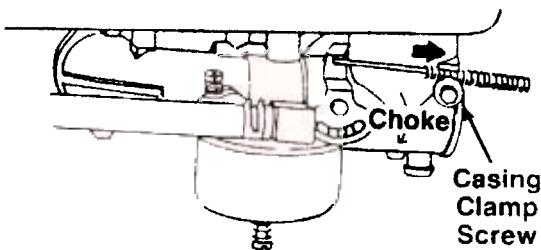
Proper choke and speed control operation is dependent upon proper adjustment of controls on the powered equipment.

To Check Operation

Move control lever to CHOKE position. The carburetor choke should be closed.

To Adjust Choke:

Place control lever on equipment in CHOKE position. Loosen casing clamp screw. Move casing and wire until choke is completely closed. Tighten casing clamp screw.



Fast Position

Throttle Control Adjustment

Place speed control lever on equipment in FAST (high speed) position. Loosen casing clamp screw "C." Move casing "A" and wire until lever "E" touches link at "F." Tighten casing clamp screw "C." Move control to STOP position. Lever must make good contact with stop switch.

SECTION 5 GENERAL INFORMATION

ENGINE DESIGN

This engine is single cylinder L-head, air-cooled type.

MODEL SERIES 281707

Bore 3-7/16" (87.31 mm)
 Stroke 3-1/16" (77.78 mm)
 Displacement 28.42 cu. in. (465.7 cc)
 Horsepower Max. 12 @ 3600 RPM
 Torque (Ft.-Lbs.) Max. 20.5 @ 2400 RPM

The horsepower ratings listed are established in accordance with the Society of Automotive Engineers Test Code-J607. For practical operation, the horsepower loading should not exceed 85% of these ratings. Engine power will decrease 3½% for each 1,000 feet above sea level and 1% for each 10° above 60° F.

In some areas, local law requires the use of a resistor spark plug so as to suppress ignition signals. If an engine was originally equipped with a resistor spark plug, be sure to use the same type of spark plug for replacement.

Major engine repairs should not be attempted unless you have the proper tools and a thorough knowledge of internal combustion engines.

TUNE-UP SPECIFICATIONS

Spark Plug Type	Champion	Autolite
Short Plug	CJ-8	235
Long Plug	J-8	295
Resistor Short Plug	RCJ-8	245
Resistor Long Plug	RJ-8	306
Spark Plug Gap030"
Intake Valve Clearance005"-.007"
Exhaust Valve Clearance009"-.011"

STORAGE INSTRUCTIONS

Engines to be stored over 30 days should be completely drained of fuel to prevent gum deposits forming on essential carburetor parts, fuel filter and tank.

NOTE: The use of a fuel additive, such as STABIL, or an equivalent, will minimize the formation of fuel gum deposits during storage. Such an additive may be added to the gasoline in the fuel tank of the engine, or to the gasoline in a storage container

- a. All fuel should be removed from the tank. Run the engine until it stops from lack of fuel.

- b. While engine is still warm, drain oil from crankcase. Refill with fresh oil.
- c. Remove spark plug, pour approximately $\frac{1}{2}$ ounce (15 cc) of engine oil into cylinder and crank slowly to distribute oil. Replace spark plug.
- d. Clean dirt and chaff from cylinder, cylinder head fins, blower housing, static guard and muffler areas.
- e. Store in a clean, dry area.
- f. Charge battery and store as recommended on page 18.

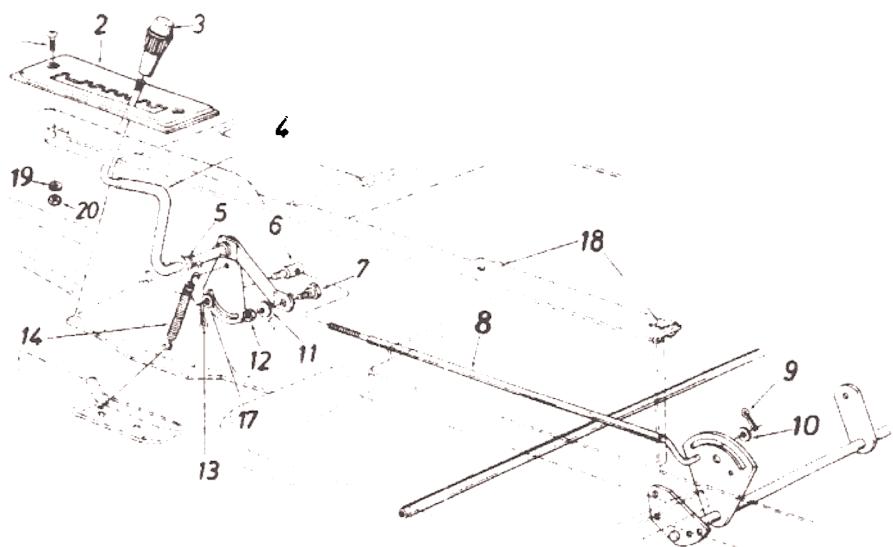
TROUBLE SHOOTING CHART FOR ELECTRIC START MODELS

TROUBLE	LOOK FOR	REMEDY
Engine will not crank	Battery installed incorrectly	The battery must be installed with the negative terminal, identified at the terminal post by (Neg. N or -), grounded. The positive terminal (Pos. P or +) attaches to the large cable from the solenoid. The small red wire from the fuse holder or circuit breaker is also attached to the positive terminal.
	Blown fuse or circuit breaker	Replace fuse with 7½ amp. fuse $\frac{1}{4} \times 1\frac{1}{4}$ " lg. Circuit breaker will reset itself when it cools off. Fuses or circuit breakers seldom open or fail without a reason. The problem must be corrected. Check for loose connections in the fuse holder. Replace fuse holder if necessary. A dead short may be in the cranking or charging circuit where the insulation may have rubbed through and exposed the bare wire. Replace the wire or repair with electrician's tape if the wire strands have not been damaged. Note: Look for a wire pinched between body panels, burned by the exhaust pipe or muffler or rubbed against a moving part.
	Battery is dead or weak	<p>Use a hydrometer to check the condition of the battery. The Specific Gravity (s.g.) should be 1.265 at 80°F. (1.215 s.g. minimum needed for cranking engine). The reason for the battery failing must be determined. (1) Defective battery. Battery will not accept or hold a full charge. (2) Short circuit. Check for grounded wire. (3) Charging system not working.</p> <p>The charging system is an alternator located under the flywheel. It is unregulated and rated 3 amp at 3600 r.p.m. A diode (rectifier) is located in the output lead just before the wire harness plug on the engine side.</p> <p>The diagram illustrates the electrical connection from the alternator to the battery and lights. It shows a diode connected in series with the battery. A red wire goes from the alternator to the diode, and a black wire goes from the diode to the battery. A shrink tube covers the connection. A polarized plug connects the battery to a 3 AMP DC (Batt.) lead, which then splits into a 7 AMP AC (Lamps) lead for the lights.</p>
Mechanical failure (Wires and switches)		<p>The diode changes A.C. to D.C. to charge the battery. A bad diode can either fail to charge the battery or discharge the battery if the alternator is shorted as well as the diode. To test: (1) Disconnect charger lead from the battery (small red wire). (2) Connect 12 V small test lamp between the 3 amp. D.C. charge lead and the positive terminal of the battery. (3) With the engine off, the lamp should not light. If it does, the diode and possibly the alternator should be replaced. (4) Start the engine. The lamp should light. If it does not, the alternator (stator) or lead wire is bad and should be replaced.</p>
Engine cranks but will not start	Throttle or choke not in starting position	Check owner's guide for correct position for throttle control and choke for starting.
	No spark to spark plug	<p>Spark plug lead disconnected. Connect lead. Hold spark plug lead away from engine block about $1/8$". Crank engine. There should be a spark. If not, have engine repaired at local Western Auto Service Center.</p> <p>Faulty spark plug. To test, remove spark plug. Attach spark plug lead to spark plug. Ground the spark plug body against the engine block. Crank the engine. The spark plug should fire at the electrode. Replace if it does not.</p>

TROUBLE SHOOTING CHART FOR ELECTRIC START MODELS

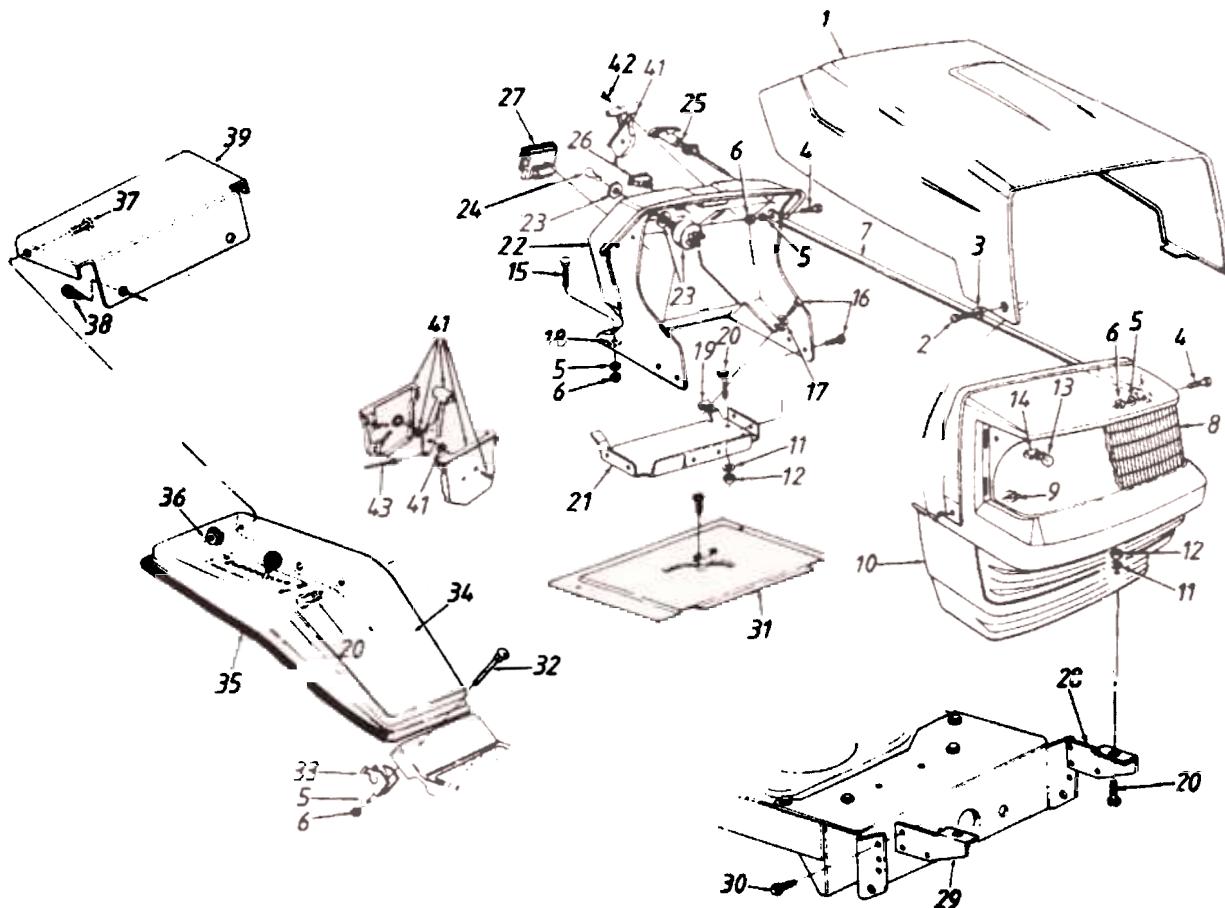
TROUBLE	LOOK FOR	REMEDY
	No fuel to the carburetor	Gasoline tank empty. Fill. Fuel line or in-line fuel filter plugged. Remove and clean fuel line. Replace filter if necessary.
	Air filter dirty	If the air cleaner is dirty, the engine may not start. Clean or replace as recommended in the engine section of this manual.
Engine smokes	Engine loses crankcase vacuum	Dipstick not sealed or broken. Replace defective part. Engine breather defective. Replace.
Excessive vibration	Bent or damaged blade spindle	Stop engine immediately. Check all pulleys, blade adapters, keys and bolts for tightness and damage. Tighten or replace any damaged parts.
	Bent blade	Stop engine immediately. Replace damaged blade. Only use original equipment blades.
Mower will not discharge grass or leaves uncut strips	Engine speed low Transmission selection Blades short or dull	Throttle must be set between 3/4 and full throttle. Use lower transmission speed. The slower your ground speed, the better the quality of cut. Sharpen or replace blades (uncut strip problem only).

ILLUSTRATED PARTS FOR MODEL MTD7122B09 LAWN TRACTOR



PARTS LIST FOR MODEL MTD7122B09 LAWN TRACTOR

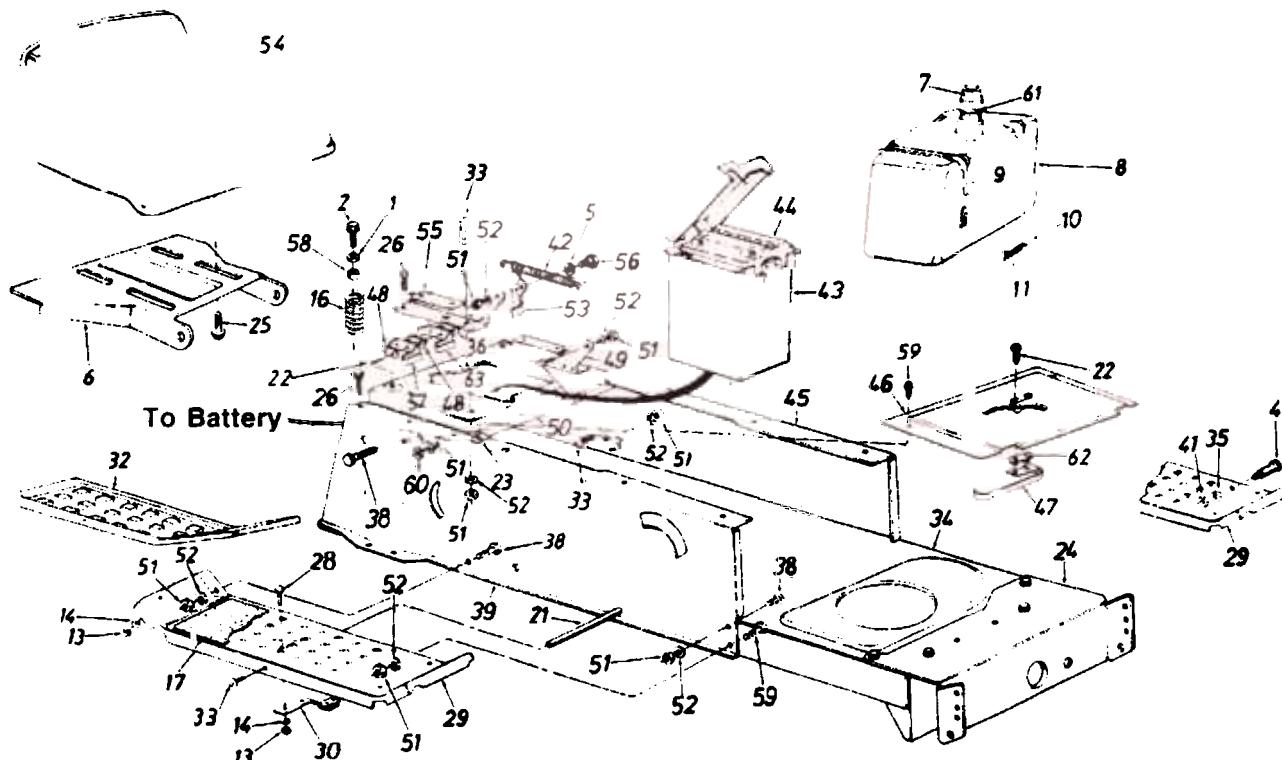
REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1	710-0924	Truss Mach. Scr. 1/4-20 x .75" Lg.	10	736-0226	Fl-Wash. .469" I.D. x .88"
2	16195	5-Speed Selector Plate	11	736-0119	L-Wash. 5/16" I.D.*
3	720-0218	Shift Knob	12	712-0267	Hex Nut 5/16-18 Thd.*
4	16192	Speed Selector Cam Ass'y.	13	714-0507	Cotter Pin 3/32" Dia. x .75"**
5	736-0192	Flat Washer .53" I.D. x .93"	14	732-0303	Spring .38" O.D. x 3.18" Lg.
6	711-0198	Ferrule 3/8-24 x .37" Dia.	17	736-0140	Fl-Wash. .385" I.D. x .62"
7	738-0155	Shoulder Bolt	18	726-0235	Speed Clip
8	747-0503A	Speed Control Link	19	736-0329	L-Wash. 1/4" I.D.*
9	714-0507	Cotter Pin 3/32" Dia. x .75"**	20	712-0287	Hex Nut 1/4-20 Thd.*



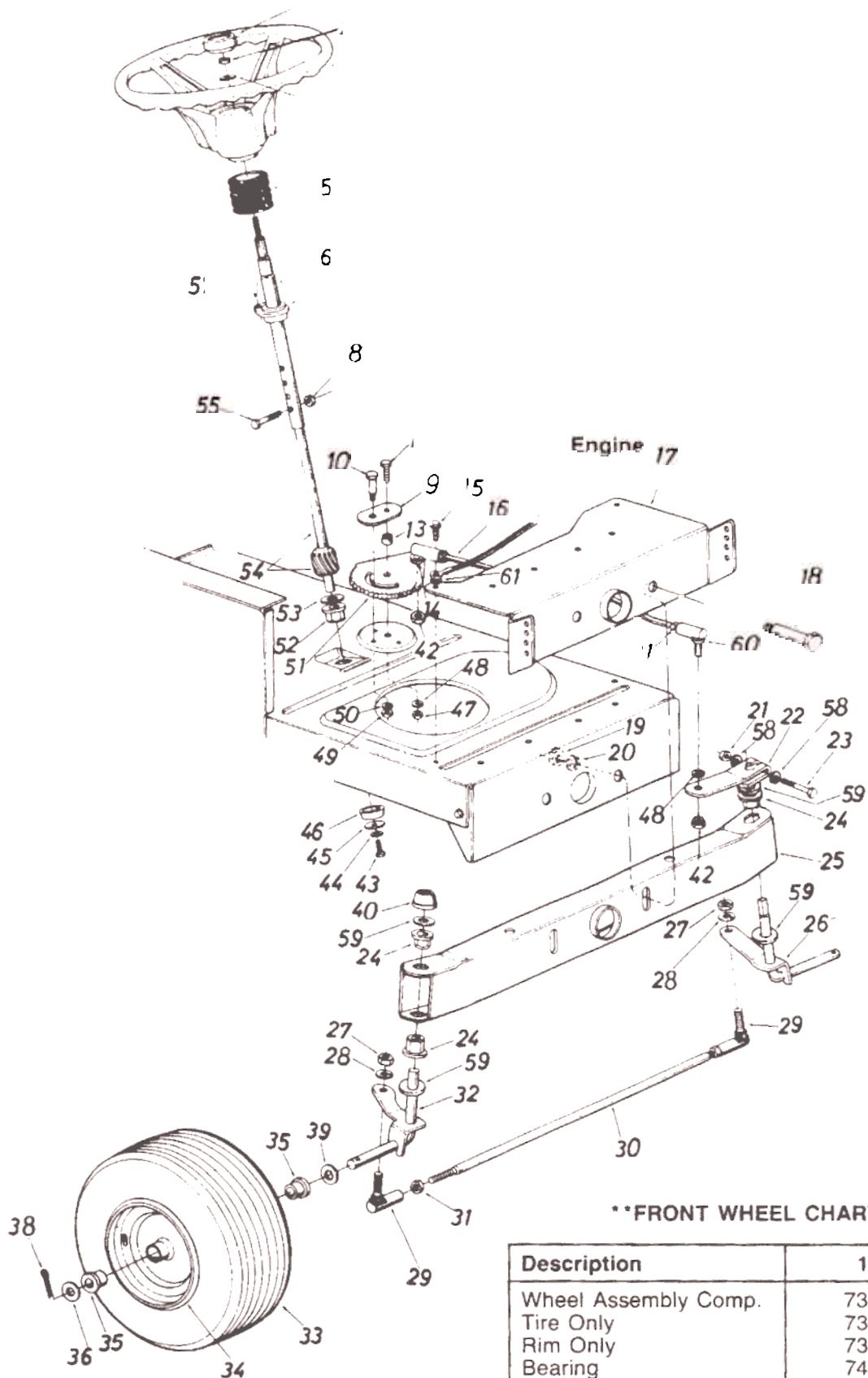
PARTS LIST FOR MODEL MTD7122B09 LAWN TRACTOR

NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1	Hood	24	725-0201	Ignition Key
2	Shld. Bolt .375" Dia. x .125" Lg.	25	746-0720	Choke Control 20" Lg.
3	Spr. Wash. .265" I.D. x .562" O.D.	26	725-0634	Light Switch
4	Hex Bolt 1/4-20 x .62" Lg.*	27	725-0925	Ammeter
5	L-Wash. 1/4" I.D.*	28	15821	Grille Mtg. Brkt.—L.H.
6	Hex Nut 1/4-20 Thd.*	29	15822	Grille Mtg. Brkt.—R.H.
7	Grille Support Rod	30	710-0607	Hex Wash. Hd. Tap Scr. 5/16 x .5" Lg.
8	Headlight Lens	31	17286	Shift Cover
9	Flange L-Nut 1/4-28 Thd.	32	710-0495	Carriage Bolt 1/4-20 x 2.0" Lg.
10	Grille L-Wash. 5/16" I.D.*	33	14671	Fender Clamp
	Hex Nut 5/16-18 Thd.*	34	16197A	Fender (R.H.)
	Lamp	35	14666	Fender (L.H.) Not Shown
	Socket	36	731-0511-80	Trim Strip
	Carriage Bolt 1/4-20 x 1.0" Lg.	37	712-0272	Hex Sems Nut #10-24 Thd.
	Hex Wash. Hd. TT-Tap Scr. 1/4-20 x .5" Lg.	38	710-0473	Truss Mach. Scr. #10-24 x .5" Lg.
	Fl-Wash. .281" I.D. x .73" O.D.	39	710-0726	Hex Wash. Hd. AB-Tap Scr. 5/16 x .75" Lg.
	Bolt Retainer 1/4" I.D.	41	14789	Fender Panel
	Speed Nut 1/4-20 Thd. 6-18 x .75" Lg.	42	831-0823A	Throttle Box Ass'y.
	Support Brkt.	43	710-0779A	Truss Mach. AB-Tap Scr. .10 x .5" Lg.
	ch		746-0501	Throttle Control Wire

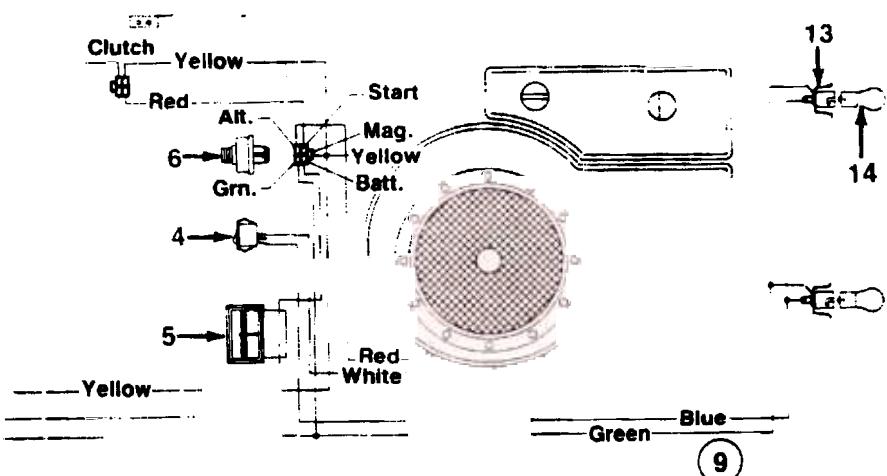
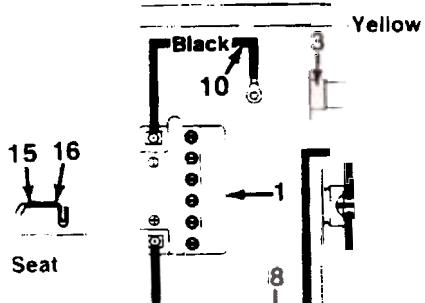
ILLUSTRATED PARTS FOR MODEL
MTD7122B09 LAWN TRACTOR



ILLUSTRATED PARTS FOR MODEL
MTD7122B09 LAWN TRACTOR



REF. NO.	PART NO.
1	731-0220
2	712-0237
3	736-0242
4	731-0805
5	731-0954
6	16512
7	741-0356
8	712-0324
9	17198
10	738-0141
11	710-0152

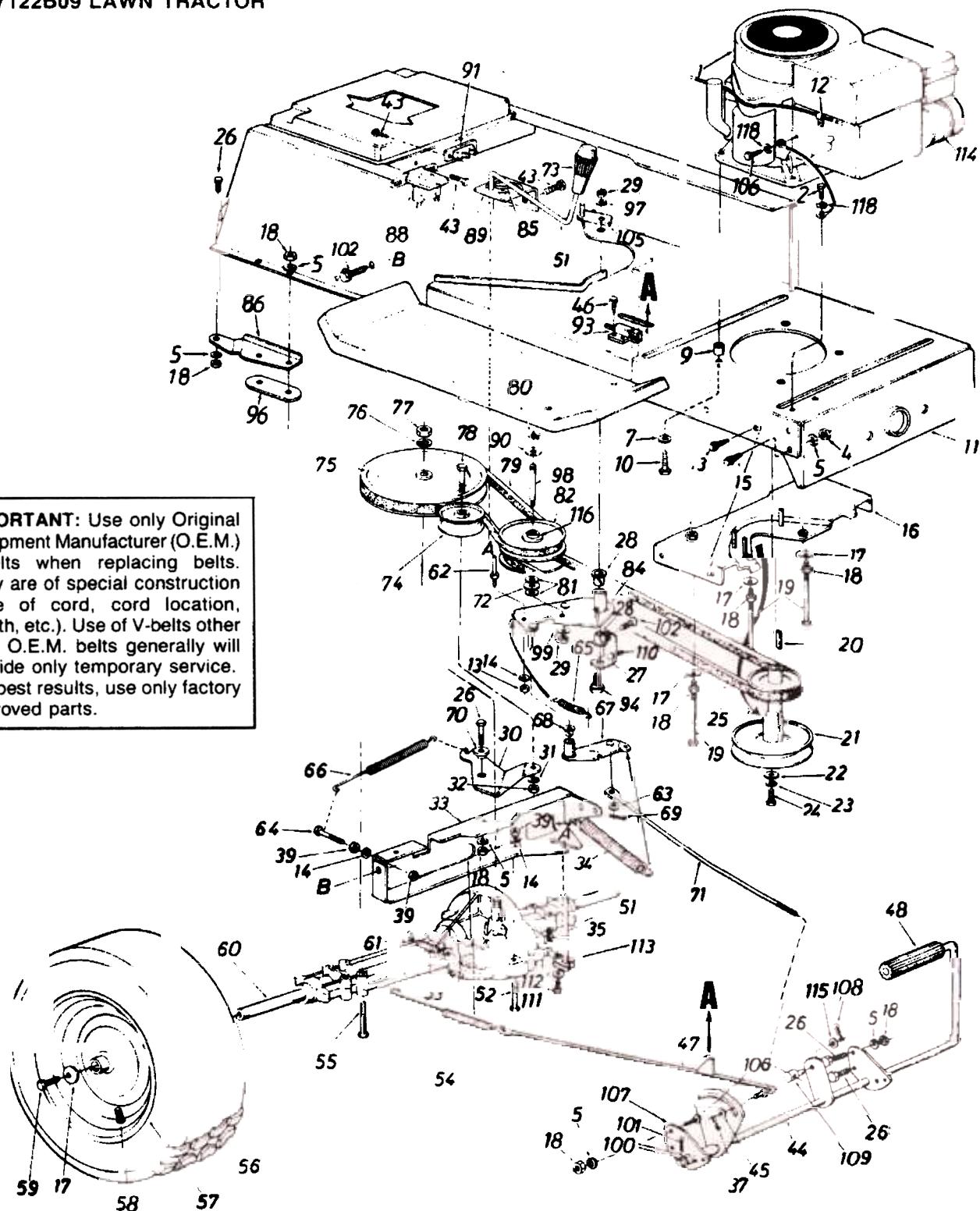


PARTS LIST FOR ELECTRICAL SYSTEM

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1	725-0514A	Battery	10	725-0977	Ground Wire 11.5" Lg.
2	725-1426	Solenoid	11	725-0803B	Safety Switch (Deck)
3	725-0459	Circuit Breaker	12	725-0759	Safety Switch (Reverse)
4	725-0634	Light Switch	13	725-1058A	Socket
5	725-0925	Ammeter	14	725-0963	Bulb
6	725-0267	Ignition Switch	15	725-1303	Safety-Switch (Seat)
7	725-3169	Safety Switch (Clutch)	16	725-1439	Safety Switch (Seat)
8	725-1351	Electric Wire—8" Lg.	17	725-0980	Ground Wire 7.5" Lg.
9	725-1494	Wire Harness			

ILLUSTRATED PARTS FOR MODEL MTD7122B09 LAWN TRACTOR

IMPORTANT: Use only Original Equipment Manufacturer (O.E.M.) V-belts when replacing belts. They are of special construction (type of cord, cord location, length, etc.). Use of V-belts other than O.E.M. belts generally will provide only temporary service. For best results, use only factory approved parts.



****REAR WHEEL CHART**

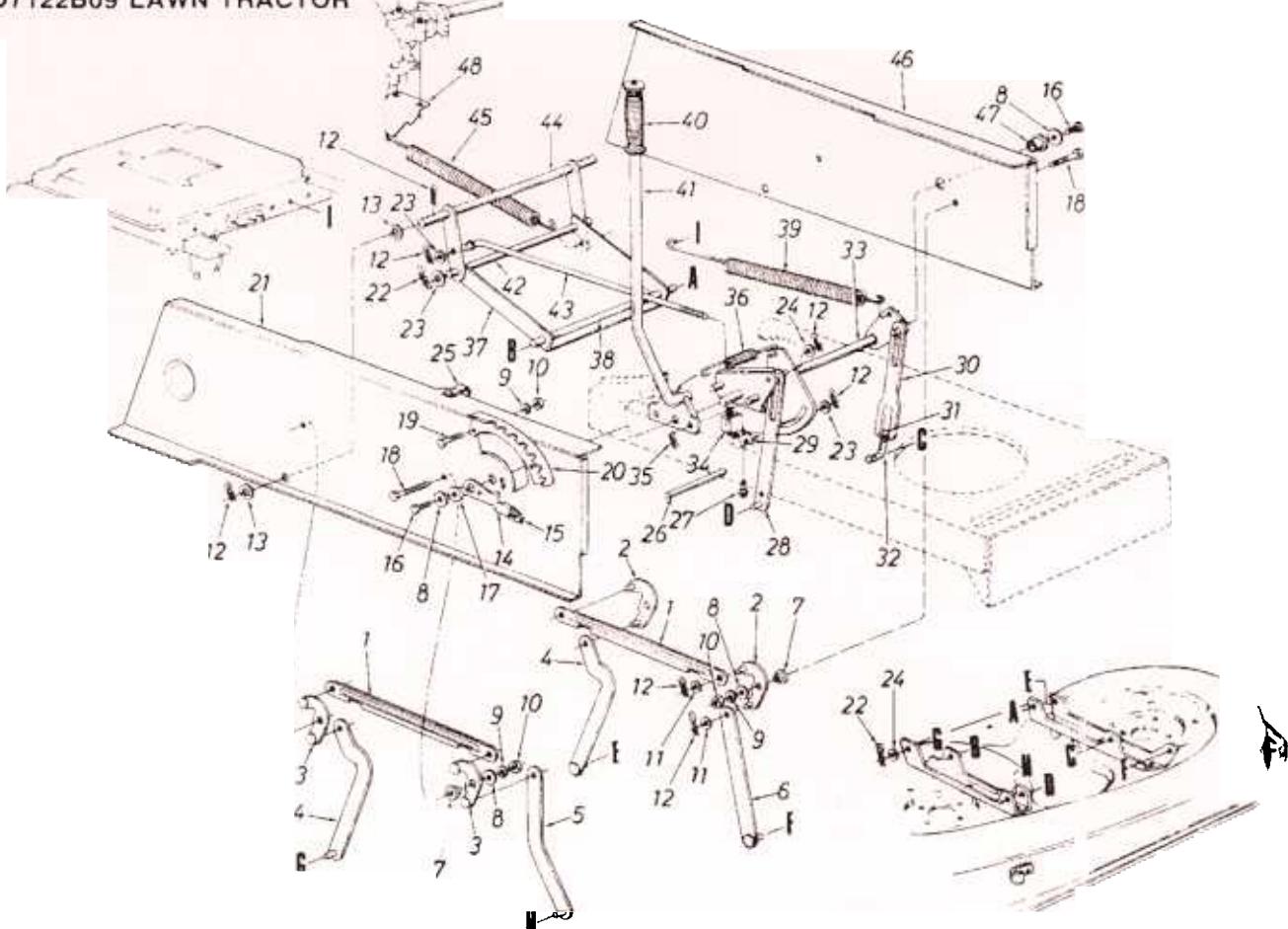
Description	18" x 6.50"
Wheel Ass'y. Comp.	734-0592
Tire Only	734-0294
Rim Only	734-0594

Note: If brand of tire is important, order by part number and description (description is printed on the sidewall of tire) [i.e. Armstrong Super Turf, Goodyear Softrac, Carlisle Turf Saver, etc.].

PARTS LIST FOR MODEL MTD7122B09 LAWN TRACTOR

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1	12 H.P.		62	711-0768	Belt Guard Pin $\frac{1}{4}$ -20 Thd.
2	710-0726	Hex Wash. AB-Tap Scr. 5/16" x .75"	63	736-0275	Fl-Wash. .34" I.D. x .68" O.D.
3	725-0977	Electric Ground Wire	64	710-0428	Hex Bolt $\frac{1}{4}$ -28 x 1.25" Lg.*
4	712-0123	Hex Nut 5/16-24 Thd.*	65	732-0568	Ext. Spring
5	736-0119	L-Wash. 5/16" I.D.*	66	732-0384	Ext. Spring .62" O.D. x 6.12"
7	736-0247	Fl-Wash. .406" I.D. x 1.25"	67	16554A	Variable Speed Torque Brkt. Ass'y.
9	750-0777	Spacer	68	741-0419	Flanged Bearing
10	710-1077	Hex L-Wash. Tap Scr. 3/8-16 x 1.5" Lg.	69	714-0507	Cotter Pin 3/32" Dia.*
11	17620	Lower Frame Ass'y.	70	748-0234	Shoulder Spacer .27" Lg.
12	726-0235	Speed Clip	71	747-0530	Speed Control Link
13	712-0287	Hex Nut $\frac{1}{4}$ -20 Thd.*	72	741-0405	Truss Bearing .56 Dia. x 1.25"
14	736-0329	L-Wash. $\frac{1}{4}$ " I.D.*	73	720-0232	Shift Knob
15	710-1012	Rib Neck Bolt 5/16-24 x .84" Lg.	74	756-0437	Fl-Idler Pulley 3.25" x .75" $\frac{1}{2}$ " "V"-Pulley
16	15898	Belt Guard Brkt. Ass'y.	75	756-0563	L-Wash. $\frac{1}{2}$ " I.D.*
17	736-0242	Bell-Wash. .345" I.D. x .88"	76	736-0921	Hex Jam Nut $\frac{1}{2}$ -20 Thd.*
18	712-0267	Hex Nut 5/16-18 Thd.*	77	712-0922	Hex Bolt 3/8-24 x 1.75" Lg.
19	710-0190	Hex Bolt 5/16-18 x 4.0"*	78	710-0539	Variable Speed Belt
20	714-0114	Sq. Key $\frac{1}{4}$ " x $\frac{1}{4}$ " x 2.00"	79	754-0370	Snap Ring .56" Dia.
21	756-0488	Engine Pulley	80	716-0114	Fl-Wash.
22	736-0322	Fl-Wash. 7/16" I.D. x 1.25"	81	736-0355	Variable Speed Pulley
23	736-0171	L-Wash. 7/16" I.D.*	82	717-0800	Ass'y. 5" O.D.
24	710-0757	Hex Bolt 7/16-20 x 1.50" Lg.	83	754-0280	Variable Speed Brkt. Ass'y.
25	754-0280	Variable-Speed Belt	84	16354B	Comp. Spring—Clip
26	710-0118	Hex Bolt 5/16-18 x .75" Lg.	85	732-0525	Axle Support Brkt.—R.H.
27	16553	Bearing Shaft Bracket Ass'y.	86	17668	Axle Support Brkt.—L.H. (Not Shown)
28	741-0295	Flanged Nyliner Brg. 5/8" I.D. x .88" Lg.	87	725-1426	Solenoid
29	712-0241	Hex Nut 3/8-24 Thd.*	88	17630	Shift Lever Bracket
30	17643	Idler Bracket	89	736-0414	Teflon Washer .565" I.D.
31	736-0169	L-Wash. 3/8" I.D.*	90	725-0459	Circuit Breaker
32	712-0241	Hex Nut 3/8-24 Thd.*	91	725-3169	Safety Switch (Clutch)
33	17629	Transaxle Support Brkt.	92	738-0755	Shld. Bolt 3/8-24 x 3.12" Lg.
34	732-0556	Ext. Spring .94" O.D. x 7.58"	93	748-0334	Transaxle Spacer
35	714-0149B	Inter. Cott-Pin	94	736-0105	Bell-Wash. .38" I.D. x .88"
36	750-0802	Spacer .63" I.D.	95	98	Shaft .56" Dia. x 3.875" Lg.
37	714-0507	Cotter Pin 3/32" Dia. x .75"*	96	738-0569	Bell-Wash. .39" I.D. x 1.12"
39	712-0138	Hex Nut $\frac{1}{4}$ -28 Thd.	97	736-0331	Fl-Wash. .64" I.D. x .94"
43	710-0599	Hex Wash. Hd. S-Tap Scr. $\frac{1}{4}$ -20 x .50" Lg.	98	100	Cotter Pin 3/32" Dia. x 1.0"*
44	17715	Clutch/Brake Pedal Ass'y.	99	736-0256	Hex Tap Scr. 5/16-18 x .62"
45	736-0117	Fl-Wash.	100	101	Belt Guard
46	710-0351	Truss Mach. Scr. B-Tap Scr. #10 x .5" Lg.	101	714-0111	Truss Mach. Scr. 5/16-18 x .75" Lg.*
47	17686	Brake Rod Ass'y.	102	710-0604	Pedal Bracket
48	735-0196	Foot Pad	103	105	Cotter Pin 3/32" Dia. x .75"
51	17705	Shift Lever Ass'y.	104	714-0507	Ferrule
52	710-0559	Hex Bolt $\frac{1}{4}$ -28 x 1.75" Lg.*	105	109	Hex Bolt 5/16-18 x 1.0" Lg.—(Gr. 5)
53	732-0264	Ext. Spring .38" O.D. x 2.5"	106	711-0198	Hex Bolt $\frac{1}{4}$ -28 x .50" Lg.
54	732-0413	Ext. Spring .59" O.D. x 7.08"	107	110	Bell-Wash. .265" I.D. x .75"
55	710-3056	Hex Bolt 5/16-18 x 3 $\frac{1}{4}$ " Lg.	108	710-0376	Shift Lever Link Ass'y.
56	**	Wheel Ass'y. Comp.	109	710-0195	Muffler
57	**	Wheel Rim Only	110	112	Conduit L-Nut (Not Shown)
58	734-0255	Air Valve (Service Only)	111	736-0270	Fl-Wash. .385" I.D. x .62"
59	710-0627	Hex Bolt 5/16-24 x .75" Lg.*	112	113	Needle Brgs. (2 Req'd.)
60	717-0542	Transaxle Complete	113	17707	External L-Wash. 5/16" I.D.
61	732-0454	Brake Return Spring Anchor	114	114	

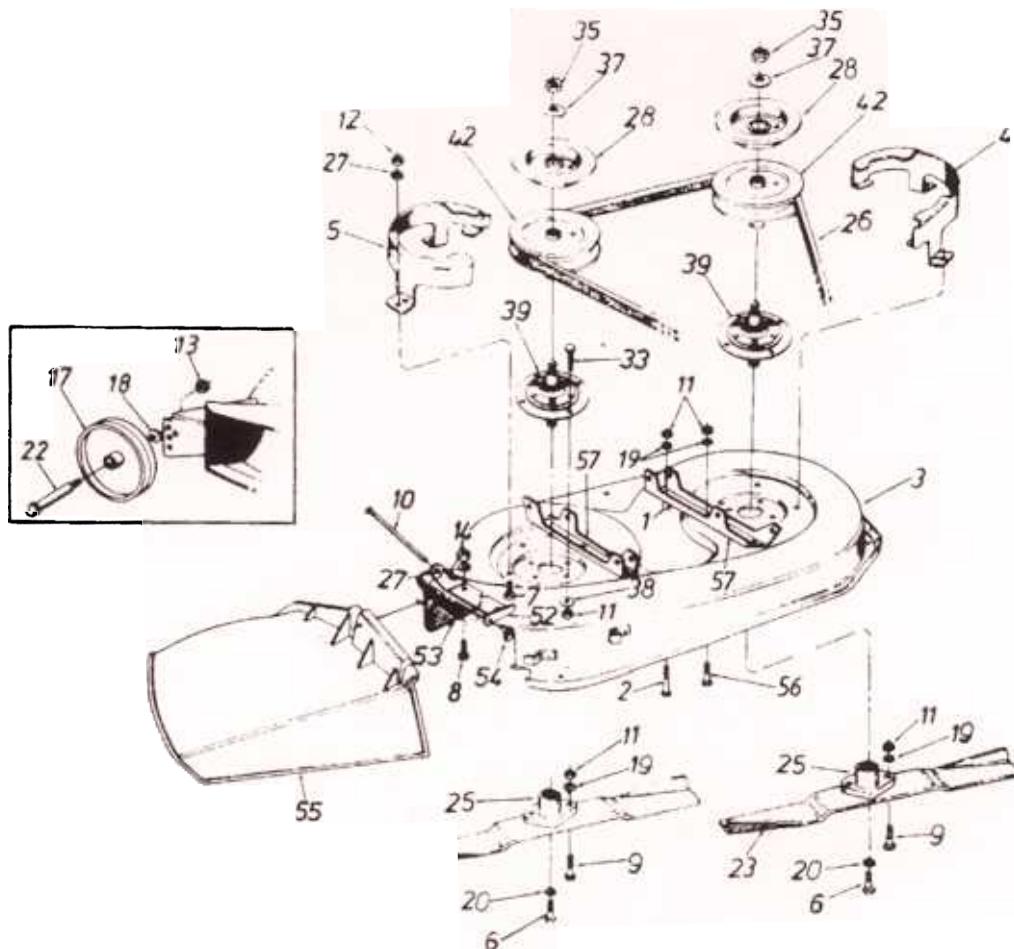
**ILLUSTRATED PARTS FOR MODEL
MTD7122B09 LAWN TRACTOR**



PARTS LIST FOR MODEL MTD7122B09 LAWN TRACTOR

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1	09735A	Connecting Rod	24	736-0160	Fl-Wash. .531" I.D. x .93" O.D.
2	17640	Pivot Link Ass'y.—L.H.	25	726-0272	Clamp
3	17641	Pivot Link Ass'y.—R.H.	26	738-0526	Running Board Rod
4	17710	Deck Hanger Link Ass'y.	27	710-0351	Truss Mach. Scr. #10 x .5" Lg.
5	14800	Deck Hanger Link Ass'y.	28	14802A	Link Deck Lift Ass'y.
6	14804	Deck Hanger Link Ass'y.	29	711-0723A	Adj. Ferrule 3/8-24 Thd.
7	748-0331	Shld. Spacer .318" I.D.	30	17712	Adj. Deck Lift Link
8	736-0231	Fl-Wash. .344" I.D. x 1.125"	31	712-3029	Hex Jam Nut 1/2-20 Thd. (Gr. 5)
9	736-0119	L-Wash. 5/16" I.D.*	32	711-0841	Lift Link Adjuster
10	712-0267	Hex Nut 5/16-18 Thd.*	33	17637	Lift Shaft Ass'y.
11	736-0192	Fl-Wash. .531" I.D. x .94" O.D.	34	725-0803B	Safety Switch (Deck)
12	714-0144	Cotter Pin 1/8" Dia.	35	714-0145	Inter. Cotter Pin 3/8" Dia.
13	736-0256	Fl-Wash. .635" I.D. x 1.0" O.D.	36	732-0637	Extension Spring
14	732-0412A	Deck Lift—Down Stop (Incl. Ref. 15)	37	17636	Stabilizer Bracket
15	08540	Knob	38	738-0670	Shaft 1/2" Dia. x 10.28" Lg.
16	710-0604	Hex Wash. TT-Tap Scr. 5/16-18 x .75" Lg.	39	732-0638	Extension Spring
17	748-0176	Flange Brg. .63" I.D.	40	720-0233	Grip (Lift Handle)
18	710-0650	Hex Wash. TT-Tap Scr. 5/16-18 .875" Lg.	41	17675	Deck Lift Handle Ass'y.
19	710-0118	Hex Bolt 5/16-18 x .75" Lg.	42	738-0669	Shaft 3/8" Dia. x 9.34" Lg.
20	17730	Index Brkt.	43	747-0598	Disengagement Rod
21	17622	Upper Frame—R.H.	44	17624	Stabilizer Shaft Ass'y.
22	714-0101	Inter. Cotter Pin 1/2" Dia.	45	732-0530	Extension Spring 13.25" Lg.
23	736-0267	Fl-Wash. .385" I.D. x .87" O.D.	46	17623	Upper Frame—L.H.
			47	741-0313	Flange Brg. .632" I.D.
			48	17128	Spring Retainer Brkt.

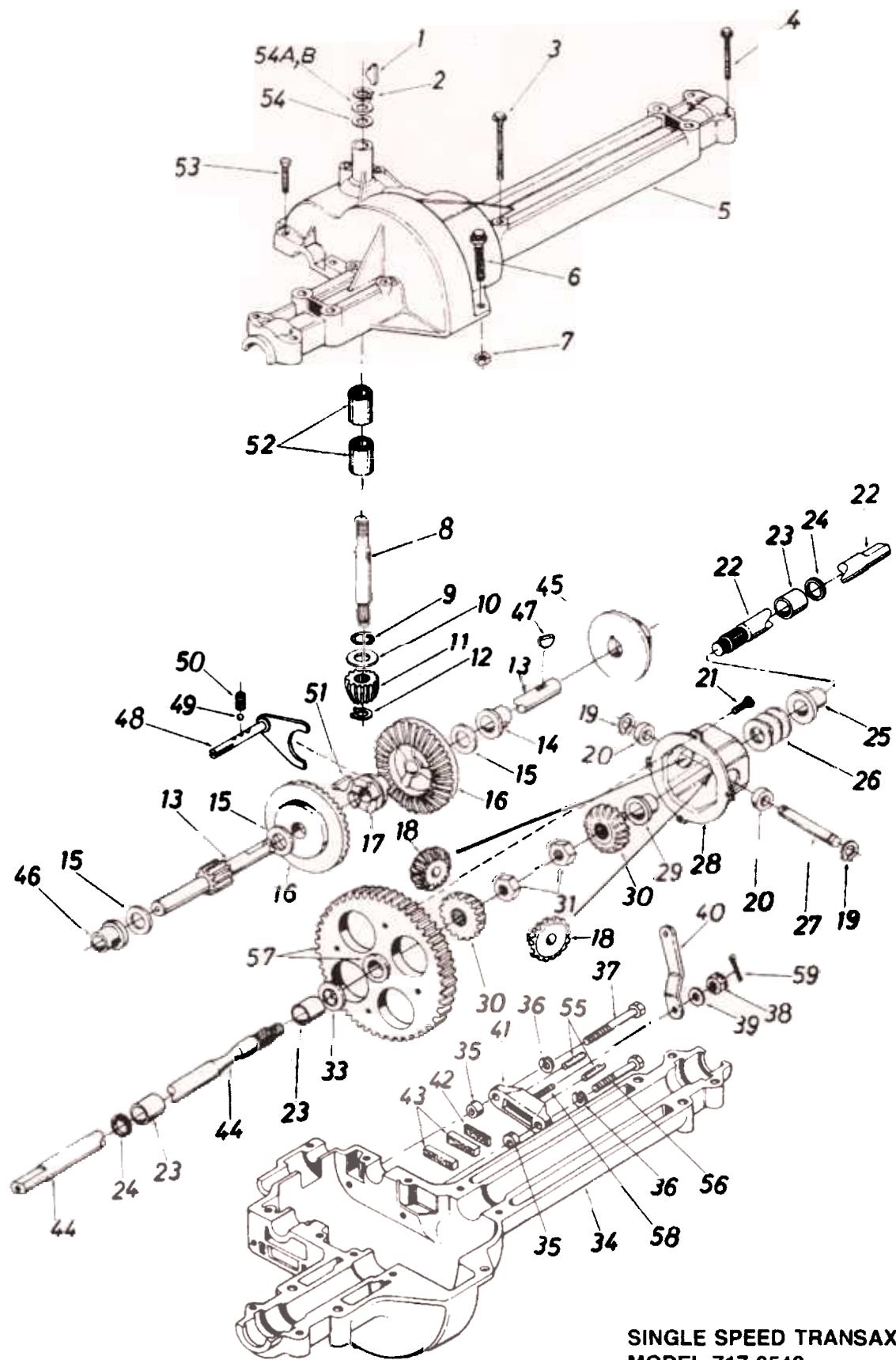
**ILLUSTRATED PARTS FOR MODEL
MTD7122B09 LAWN TRACTOR**



PARTS LIST FOR MODEL MTD7122BA09 LAWN TRACTOR

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1	750-0776	Spacer .33" I.D. x .88"	20	736-0217	L-Wash. 3/8" I.D.—H.D.
2	710-0672	Hex Bolt 5/16-24 x 1.25" Lg.	21	736-0329	L-Wash. 1/4" I.D.*
3	17503	38" Deck Ass'y.	22	738-0373	Shld. Bolt .498" Dia. x 1.53"
	801-7503	38" Deck Ass'y. Comp. (For Service Only)	23	742-0473A	High-Lift Blade
4	16607	Belt Guard Deck—L.H.	25	748-0300	Blade Adapter
5	16608A	Belt Guard Deck—R.H.	26	754-0329	V-Belt
6	710-0152	Hex Bolt 3/8-24 x 1.0" Lg.	27	736-0270	Bell-Wash. 1/4" I.D.
7	710-0195	Hex Bolt 1/4-28 x .62" Lg.	28	09322	Brake Disc
8	710-0255	Truss Mach. Scr. 1/4-20 x .75"	33	710-0157	Hex Bolt 5/16-24 x .75" Lg.
9	710-0888	Hex Bolt Special 5/16-24 x 1.0"	35	712-0318	Hex Jam Nut 5/8-18 Thd.
10	711-0792	Hinge Pin	37	736-0158	L-Wash. 5/8" I.D.*
11	712-0123	Hex Nut 5/16-24 Thd.*	38	736-0119	L-Wash. 5/16" I.D.*
12	712-0138	Hex Nut 1/4-28 Thd.	39	717-0906	Blade Spindle Ass'y. Comp.
13	712-0181	Hex Top L-Nut 3/8-16 Thd.	42	756-0486	5" Dia. Pulley
14	712-0287	Hex Nut 1/4-20 Thd.*	52	703-1693	Hinge Mtg. Brkt.
17	734-0973	Deck Wheel—5"	53	732-0602	Torsion Spring
18	736-0105	Bell-Wash. .40" I.D. x .88" O.D.	54	726-0106	Push Nut
19	736-0119	L-Wash. 5/16" I.D.*	55	731-1032	Chute Ass'y. Comp.
			56	710-0157	Hex Bolt 5/16-24 x .75" Lg.
			57	17493A	Deck Hanger Channel

ILLUSTRATED PARTS FOR MODEL
MTD7122B09 LAWN TRACTOR



SINGLE SPEED TRANSAKLE—R.H.
MODEL 717-0542

PARTS LIST FOR MODEL MTD7122B09 LAWN TRACTOR

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1	714-0129	#4 Hi-Pro Key 3/32 x 5/8" Dia.	33	736-0351	Fl-Wash. .75" I.D. x 1.5" O.D.
2	716-0115	Snap Ring .625" Shaft	34	717-0541	Lower Housing
3	710-0854	Hex Bolt 1/4-20 x 1.75" Lg.*	35	750-0555	Spacer .53" O.D. x 3/8" Lg.
4	710-0809	Hex Bolt 1/4-20 x 1.25" Lg.*	36	736-0329	L-Wash. 1/4" I.D.*
5	717-0540	Upper Housing	37	710-0886	Hex Bolt 1/4-20 x 1.50" Lg. (Grade 5)
6	710-0642	Hex Fl-Bolt 1/4-20 x .75" Lg.	38	712-0335	Castle Nut 5/16-24 Thd.*
7	712-0287	Hex Nut 1/4-20 Thd.*	39	736-0371	Fl-Wash. .34" I.D. x .875" O.D.
8	717-0634	Input Shaft	40	717-0700	Actuating Arm—R.H.
9	721-0178	Square Seal 5/8" I.D.	41	717-0679	Brake Yoke
10	736-0335	Thrust Washer 5/8" I.D. x 1.25" O.D.	42	717-0682	Puck Plate
11	717-0633	Pinion Input 14T	43	717-0678	Brake Puck
12	716-0108	Retaining Ring 7/16" Ext.	44	717-0536	Axle L.H.
13	717-0758	Drive Shaft—R.H.	45	717-0677	Brake Disc
14	741-0336	Flange Brg. 5/8" I.D. x 3/4" Lg.*	46	741-0337	Flange Bearing 5/8" I.D. x 15/16" Lg.
15		Fl-Wash. (See Below)	47	714-0161	Woodruff Key 3/16 x 5/8 HT
16		Bevel Gear 42T	48	717-0754	Shift Fork Ass'y.
17		Clutch Collar	49	741-0862	Ball Detent .250" Dia.
18		Miter Gear 15T	50	732-0863	Spring Detent
19		Snap Ring	51	714-0169	#9 Hi-Pro Key 3/16" x 3/4" Dia. HT
20		Thrust Bearing 1/2" I.D. x 1.0" O.D.	52	741-0335	Needle Brg. 5/8" I.D. x 1/2" Lg.
21	710-0862	Pan Head Scr. 1/4-20 x .50" Lg. w/Patch	53	710-0855	Hex Bolt 1/4-20 x 1.00" Lg.
22		Axle R.H.	54	736-0336	Fl-Wash. 5/8" I.D. x .030
23		Sleeve Bearing 3/4" I.D. x 1.0" Lg.	54A	736-0337	Fl-Wash. 5/8" I.D. x .040
24	721-0179	Oil Seal 3/4" I.D.	54B	736-0349	Fl-Wash. 5/8" I.D. x .020
25	741-0339	Flange Bearing 3/4" I.D. x 15/16" Lg.	55	741-0343	Actuating Pin 5/16" Dia.
26		Fl-Wash. .760" I.D. x 1.49" O.D.	56	710-0886	Hex Bolt 1/4-20 x 1.50" Lg. (Grade 5)
27	717-0673	Cross Shaft	57	717-0767	Differential Gear 72T Ass'y. w/Bearing
28	717-0777	Differential Housing Ass'y.	58	717-0796	Sq. Hd. Bolt 5/16-24 Thd.
29	—	Comes with Ref. 28	59	1544-013	Cotter Pin 3/32" Dia. x .50" Lg.
30	717-1019	Miter Gear		737-0148	Grease—Shell (16 oz. pkg.— 10 oz. Req'd.)
31	712-0200A	Hex Ins. L-Nut 1/2-20 Thd.			

*Ref. No. 15 736-0349 Fl-Wash. 5/8" I.D. x 1.0" O.D. x .020 Thk.
 736-0336 Fl-Wash. 5/8" I.D. x 1.0" O.D. x .030 Thk.
 736-0337 Fl-Wash. 5/8" I.D. x 1.0" O.D. x .040 Thk.

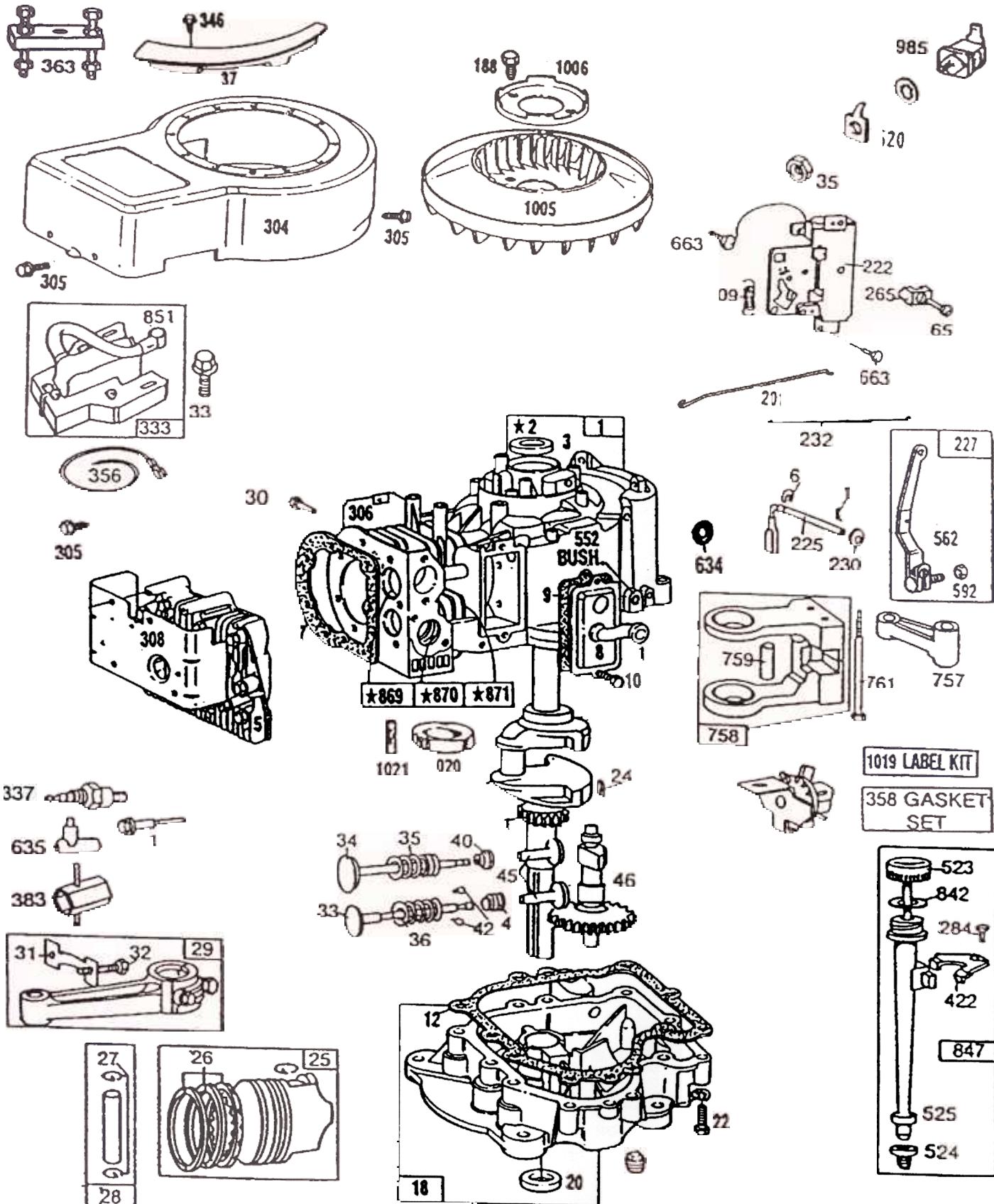
At the time of manufacture of lawn tractor, the following optional equipment is available.

Description	Stock No. (Factory No.)
Grass Collector	95-1136-1 (190-064)
42" Snow Blade	95-2547-8F (190-485)
36" Snow Thrower	95-2557-7F (190-491)

ILLUS. RATED PARTS FOR 28
FOR MODEL MTD712IB09

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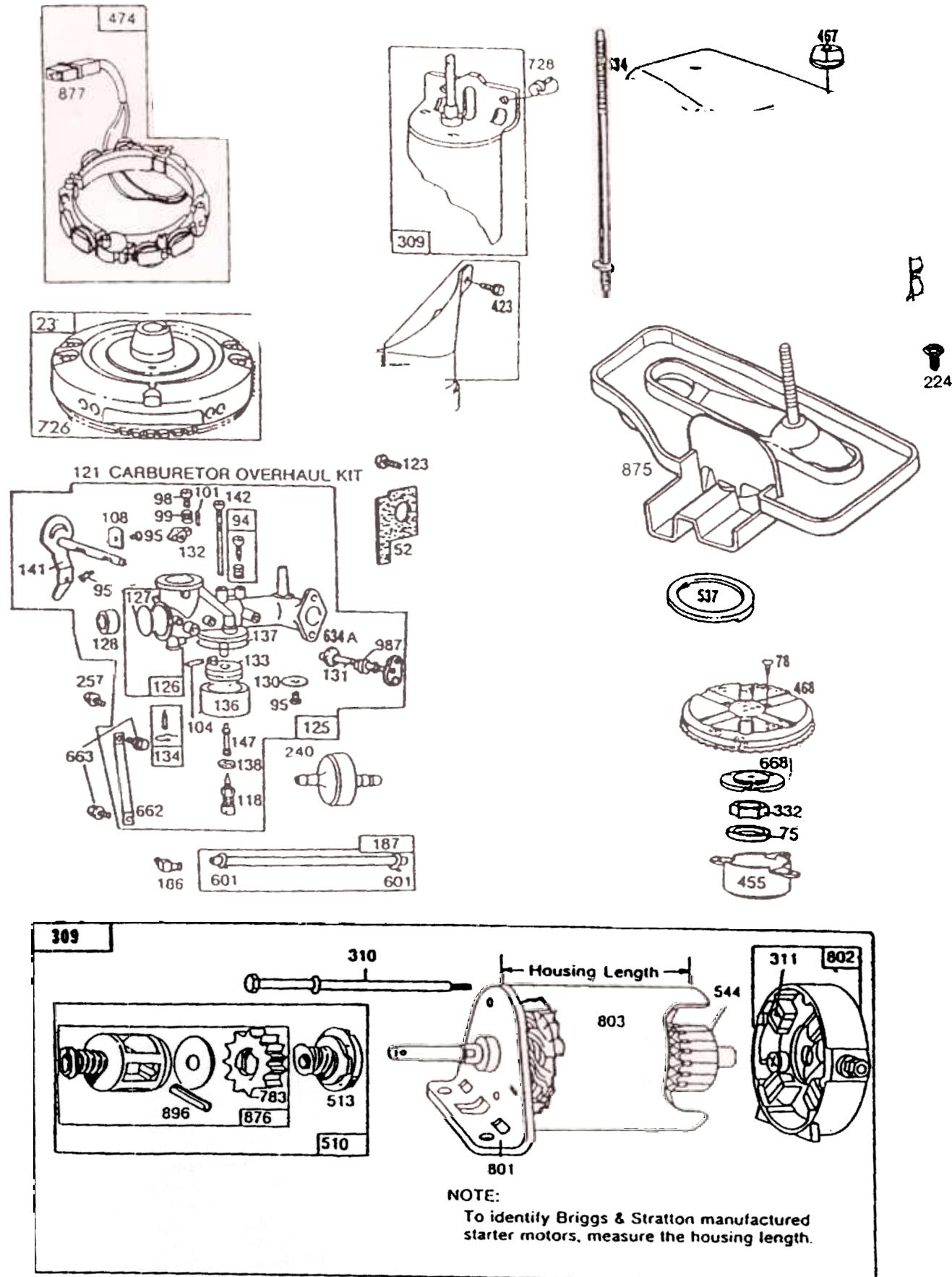


SPECIAL TOOLS
TO INSTALL

R Q U I R E D

R A D I O INT UD ON
MANUAL

**ILLUSTRATED PARTS FOR 281707-0411-01 ENGINE
FOR MODEL MTD7122B09 LAWN TRACTOR**



**PARTS LIST FOR 281707-0411-01 ENGINE
FOR MODEL MTD7122B09 LAWN TRACTOR**

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1	490450	Cylinder Assembly	41	292260	Rotocoil—Exhaust Valve
2	399265	Bearing—Cylinder	42	93630	Retainer—Exhaust Valve
3	391086	Seal—Oil			Rotocoil (2)
5	491491	Head—Cylinder	45	262248	Tappet—Valve
7	*271866	Gasket—Cylinder Head	46	212897	Gear—Cam
8	391406	Breather Assembly	52	*270872	Gasket—Carburetor Mounting
9	*27803	Gasket—Valve Cover	78	93805	Screw—Sem
10	93394	Screw—Sem	94	*292681	Valve Assembly—Carburetor Idle
11	280100	Tube—Breather	95	93499	Screw—Throttle and Choke
12	*271916	Gasket—Crankcase Cover— 1/64" Thick	98	91920	Valve Mounting Sem
	*271996	Gasket—Crankcase Cover— .005" Thick	99	26157	Screw—Machine Fill. Hd. 8-32 x 5/8"
	*271997	Gasket—Crankcase Cover— .009" Thick	101	93043	Spring—Throttle Adjustment
13	93723	Screw—Cylinder Head (3" long)	104	*230896	Pin—Throttle Stop
15	91084	Plug—Oil Drain	108	222010	Pin—Float Hinge
16	490466	Crankshaft	118	396568	Valve Choke
		Note: Order Part Number 94196 for Timing Gear Key.	121	394698	Valve—Needle
18	490452	Base—Engine	123	93357	Carburetor Overhaul Kit
20	291675	Seal—Oil	125	490472	Screw—Carburetor Mounting
22	94305	Screw—Base Mounting Sem	126	490473	Carburetor Assembly
23	492326	Flywheel and Ring Gear Assembly—Magneto	127	*221997	Body Assembly Carburetor
24	222698	Key—Flywheel	128	211960	Plug—Welch
25	394661	Piston Assembly—Standard	130	222433	Venturi—Carburetor
	394662	Piston Assembly—.010" O.S.	131	491006	Valve—Throttle
	394663	Piston Assembly—.020" O.S.	132	211712	Shaft and Lever—Throttle
	394664	Piston Assembly—.030" O.S.	133	299707	Stop—Throttle
		PISTON RING SET	134	*394681	Float—Carburetor
		Note: For Chrome Ring Set— Standard Size—Order No. 392331.	136	221995	Valve—Fuel Inlet
26	394665	Ring Set—Piston—Standard	137	*270511	Bowl—Float
	391781	Ring Set—Piston—.010" O.S.	138	*222014	Gasket—Float Bowl
	391782	Ring Set—Piston—.020" O.S.	141	390684	Washer—Float Bowl
	391783	Ring Set—Piston—.030" O.S.	142	*299740	Shaft and Lever—Choke
27	260924	Lock—Piston Pin	147	*231323	Nozzle—Carburetor
28	299691	Pin Assembly—Piston— Standard	171	281051	Screw—Nozzle
	391786	Pin Assembly—Piston— .005" O.S.	186	67218	Nut—Air Cleaner Mounting
			187	393815	Connector—Fuel Pipe
29	490348	Rod Assembly—Connecting Note: For Connecting Rod with .020" Undersize Crankpin Bore—Order No. 490469	188	93535	Line—Fuel
			201	262348	Screw—Sem (3/4" Long)
			209	260695	Link—Governor
			219	490815	Spring—Governor
			224	94018	Oil Slinger, Governor Gear and Bracket Assembly
			225	231058	Screw—Sem
			227	490927	Crank—Governor (1/4" Dia.)
			230	222450	Lever Assembly—Governor
			232	260584	Washer—Governor Crank (1/4" I.D.)
			240	298090	Spring—Governor Link
31	222299	Lock—Connecting Rod Screw	240	93543	Filter—Fuel
32	92909	Screw—Connecting Rod	257	93543	Screw—Control Casing
33	262246	Valve—Exhaust	265	221535	Clamp—Casing
34	262247	Valve—Intake	284	93572	Screw—Clamp Mtg.
35	65906	Spring—Intake Valve	304	490689	Housing—Blower
36	26828	Spring—Exhaust Valve	305	93158	Screw—Blower Housing Mounting Sem
37	223752	Guard—Flywheel	306	223715	Shield—Cylinder
40	221596	Retainer—Intake Valves	307	93163	Screw—Cylinder Shield Mounting Sem

**PARTS LIST FOR 281707-0411-01 ENGINE
FOR MODEL MTD7122B09 LAWN TRACTOR (CONTINUED)**

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
308	491490	Cover—Cylinder Head	634A	271853	Washer—Throttle Shaft Seal (Foam)
309	394806	Motor and Drive Ass'y.—Starting (12 Volt)	635	66538	Elbow—Spark Plug
310	94003	Thru Bolt Assembly	657	93496	Screw—Sem
311	395538	Brush Assembly	662	222311	Bracket—Carburetor
332	92284	Nut—Hex	663	93572	Screw
333	492341	Armature—Magneto	668	280848	Spacer
334	93381	Screw—Armature Mounting Sem	726	392134	Gear—Ring (Includes Mounting Parts)
337	802592	Plug—Spark	727	490324	Cover—Starter (Includes Mounting Screws)
346	93705	Screw—Sem	728	93535	Screw—Sem
353	92791	Washer—Lock—Shakeproof	741	262199	Gear—Timing
354	90576	Nut—Hex—8-32	757	212359	Link—Counterweight
356	398808	Wire—Ground	758	399891	Counterweight Assembly
358	490525	Gasket Set	759	298909	Pin—Counterweight (1)
363	19203	Puller—Flywheel	761	93875	Screw—Counterweight (1)
383	89838	Wrench—Spark Plug	783	280104	Gear
422	223721	Clamp—Oil Filler Tube	801	394857	Enc Cap Assembly Drive
423	93984	Screw—Sem	802	395537	Enc Cap Assembly Com- mutator (Incl. Brush Set)
445	399806	Cartridge—Air Cleaner	803		Housing Assembly
455	222561	Cup—Screen Mounting	842		Seal—Oil Filler Cap
467	212706	Knob—Air Cleaner	847		Fill Group—Oil
468	222562	Screen—Flush Rotating	851		Terminal—Ignition Cable
474	393474	Stator—Alternator	869		Seat—Intake Valve (Standard)
482	93621	Screw—Sem	870	210940	Seat—Exhaust Valve (Standard)
510	490421	Drive Assembly (Incl. Ref. Nos. 513, 783, 876 & 896)	871	261961	Guide—Exhaust Valve Note: 231218 Guide—Intake Valve (Brass) See Repair Manual
	398003	Clutch Assembly	872	223700	Cover—Air Cleaner
	93722	Terminal—Spade	875	491877	Body—Air Cleaner
	490327	Cap and Dipstick—Oil Filler	876	490467	Retainer Kit
	68838	Seal—Filler Tube	877	393456	Diode and Connector Assembly
	280741	Tube—Oil Filler	896	94288	Roll Pin
	94248	Stud—Air Cleaner	985	398525	Insulator Assembly
	271962	Element—Air Cleaner	987	398970	Seal—Throttle Shaft
	270853	Gasket—Air Cleaner	1005	280687	Fan—Flywheel
	390837	Armature Assembly	1006	223726	Retainer—Fan
	94249	Washer—Air Cleaner	1020	262243	Eccentric
	231597	Bushing—Governor Crank ($\frac{1}{4}$ " I.D.)	1021	94160	Pin—Eccentric
562	92613	Bolt—Governor Lever			
592	231082	Nut—Hex 10-24			
601	93053	Clamp—Fuel Pipe			
614	93306	Cotter—Hairpin			
615	93307	Retainer—E-Ring			
634	491323	Seal—Oil			

*Included in Gasket Set—Part No. 490525.

†Included in Carburetor Overhaul Kit—
Part No. 394698.

HOW AND WHERE TO ORDER REPLACEMENT PARTS

To eliminate error and to speed delivery of replacement parts, always include the following information on your order.

IMPORTANT

To correctly identify the merchandise by model number for which a part is needed, refer to the Model No. Label located on the frame, under the seat.

Complete identification of the merchandise for which the part is wanted.

- (a) Name of Item—Lawn Tractor
- (b) Model No.—MTD7122B09
- (c) Factory No.—130-610F098

2. Best possible identification of the part itself.
 - (a) Part Number—
 - (b) Part Name—
 - (c) If necessary return the old part as sample.
3. CUSTOMERS may order all replacement parts from any participating Western Auto Store.
4. If it is not possible to order through a Western Auto Store or Associate Store, replacement parts may be ordered directly from the Western Auto National Parts Distribution Center.

Western Auto National Parts Distribution Center
P.O. Box 183
Birmingham, Alabama 35283-0183
(205) 328-1501